GUINEAWORM ERADICATION PROGRAMME IN INDIA

XIV TASK FORCE MEETING

9th and 10th January 1992
DELHI

REPORT
AND
RECOMMENDATIONS

NATIONAL INSTITUTE OF COMMUNICABLE DISEASES
(Division of Helminthology)
22, SHAM NATH MARG, DELHI - 110 054
Directorate General of Health Services
Ministry of Health & Family Welfare
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Acknowledgements

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FOREWORD

The National Guineaworm Eradication Programme (GWEP) in India has been functioning from 1983-84 with N.I.C.D. as the focal point. At the beginning of the GWEP, about 40,000 guineaworm cases were recorded in 12,840 villages of 89 districts of seven endemic states in the country. While Tamil Nadu is guineaworm disease free from 1985, the states of Maharashtra and Gujarat reported zero guineaworm incidence in 1991. During 1991 only 2185 guineaworm patients have been recorded in 576 active case villages. As on 1.1.1992, only 1906 villages in 40 districts of six endemic states remain on the guineaworm endemic list.

Besides concurrent and independent evaluations, the GWEP is annually reviewed in-depth by a "Task Force" under the chairmanship of Director General of Health Services, Govt. of India. The present 14th meeting of the "Task Force on GWEP" assumes great significance of being held at a crucial juncture when we are very near to achieve the national objective of zero guineaworm incidence in the country. We are grateful to all the Senior Health & PHED/RD officials from guineaworm endemic states and the invitees for their active participation in this meeting and assuring continued efforts towards guineaworm eradication. I am sure that the "Report and Recommendations" of this meeting will help every one of us involved in efficient implementation, supervision and evaluation of GWEP at different levels while maintaining an inter-sectoral co-ordination of high order.

We thank WHO for providing financial assistance to conduct the meeting, as well as to the Directorate General of Health Services and Ministry of Health & Family Welfare, Govt. of India for their full support to GWEP. I appreciate the hard work of Dr. Ashok Kumar and his team from the Division of Helminthology, N.I.C.D., Delhi in organising & bringing out the report of this meeting.

(Dr. T. VERGHESE)

A. Proceedings of 14th Task Force Meeting on Guineaworm Eradication Programme (GWEP) in India held at National Institute of Communicable Diseases (NICD) Delhi, January, 1992

The National Guineaworm Eradication Programme (GWEP) in India has been functioning from 1983-84 on well defined strategies, methodology and information - system. Besides concurrent and independent evaluations, the GWEP is annually reviewed in depth by a "Task Force Group" under the Chairmanship of Director General of Health Services, Govt. of India. This task force group is constituted by (a) Director and Deputy Director (Helminthology) of NICD Delhi as convener and coordinator of the meeting, (b) Directors of Health and Medical Services, GWEP-Officers, Chief Engineers (PHED/Rural Water Supply) of guineaworm endemic states and Director/Adviser of National Drinking Water Mission/Technology Mission, as members and (c) invitees as Secretaries Health & PHED/RD of endemic states and experts from WHO, UNICEF, Central Health Education Bureau, Planning Commission and related organisations.

The 14th Task Force Group (Appendix I) met at NICD Delhi, the nodal agency for National GWEP, on 9th and 10th January 1992 with the objectives to :

I. Indepth review of

1) Epidemiological situation of GW Disease in the country as on 31st December '91/1st January '92,

2) Implementation and performance of various Operational components of GWEP during 1991,

3) Major actions undertaken in the programme, and

4) Achievement of GWEP from 1984 to 1991

II. Recommendations for an efficient and effective planning, implementation, supervision and evaluation of GWEP to achieve zero guineaworm incidence in the country, and

III. Prepare the plan of action under GWEP for 1992

In the inaugural session, while welcoming the invitees and members of the Task Force, Dr. T. Verghese, Director, NICD, impressed upon the state Health and PHE departments of Guineaworm endemic states to prioritise the implementation and supervision of GWEP at all levels. He felt that the problem in implementation were not because of any lack of resource but perhaps could be due to **incomplete inter-sectoral co-ordination** amongst the concerned agencies. In the national interest, NICD, Delhi, will continue to provide the necessary support required in achieving harmonious co-ordination. He appreciated the efforts of the Govts. of Maharashtra and Gujarat in achieving zero guineaworm status in 1991, however, stressed the need for intensive surveillance activities.

The Union Ministry of Health & F.W. and the Directorate General of Health Services, Govt. of India, conveyed their firm commitment to eradicate guineaworm disease from the country, and therefore requested the GW endemic states to accord TOP PRIORITY to GWEP.

Mr. Mazumdar appreciated NICD for its sincere efforts towards guineaworm eradication in the country and promised total support from the Ministry of Rural Development, Govt. of India, for provision and maintenance of safe drinking water supply in all the guineaworm affected villages and hamlets of endemic states.

Dr. N.K. Shah, Director, Prevention and Disease Control, World Health Organisation, Delhi, expressed his profound satisfaction over the impressive achievements of GWEP and felt that globally "India" is in the best position to eradicate guineaworm disease in the very near future and would lead other endemic countries of the world in this direction. While complimenting the states of Maharashtra and Gujarat for attaining zero guineaworm incidence in 1991, Dr. Shah hoped that other GW endemic states especially Rajasthan, will further enhance their concerted efforts towards GW-eradication.

In his inaugural address, Dr. Olavi Elo, WHO Representative to India commented that a well planned, coordinated and efficiently implemented "Indian Guineaworm Eradication Programme" has made significant progress. He felt that a few problems, particularly in the State of Rajasthan, can be effectively handled by further strengthened surveillance, "On the spot" supervision and inter-sectoral co-ordination at all levels of programme implementation. Indian GWEP envisages an excellent Information and Evaluation system. The recently devised "Operational-parameters" by NICD could be advantageously used for concurrent-evaluation to

improve the GWEP efficiency & effectiveness. Likewise, appropriate indicators for evaluating the "Safe Drinking Water Supply" needs to be developed. While appreciating the intensive efforts of twelve Epidemiological Surveillance Teams (ESTs) over last two years, Dr. Elo promised WHO's continued support towards guineaworm eradication, and hoped that this Task Force will successfully deliberate on its objectives.

While delivering the 'Vote of Thanks', Dr. Ashok Kumar, Deputy Director NICD, mentioned that all the GW endemic states deserved special compliments for their determined efforts to achieve Guineaworm Eradication in near future and felt that their shared experiences will enhance our abilities to achieve our national objectives while mobilising the resources for greatest impact. **He reiterated the need of implementing "GW-affected village specific action plan" to effectively interrupt GW transmission in 1992.**

An exhibition was organised wherein the invitees and members took opportunity to acquaint themselves with (1) guineaworm disease; (2) current guineaworm situation in the states and country; (3) resource inputs to GWEP; (4) GWEP achievements; (5) computerised information system under GWEP; (6) functions of twelve ESTs; (7) newly developed material for community education; (8) demonstration of guineaworm and cyclops; (9) kit for temephos application, and (10) the recent publications by NICD under GWEP.

Further proceedings of the meeting were held as per the scheduled programme (Appendix II) during which the Directors of Health and Medical Services/GWEP Officers of all the endemic states presented the status report on the current guineaworm situation, GWEP implementation and further plan of action with regard to their respective states, as per the guidelines (Appendix III) provided to them.

A session under the Chairmanship of Mr. B.K. Taimni, Principal Secretary (PHED) to Govt. of Madhya Pradesh and Mr. A.K. Dubey, Deputy secretary to Ministry of Rural Development, Govt. of India as co-chairperson, reviewed the status and target achievement in the provision and maintenance of safe drinking water supplies, including conversion of priority unsafe water sources in guineaworm affected areas, as presented by the Chief/Supdt. Engineers (PHE/RWS) of endemic states. It was agreed that at least one safe drinking water source must be provided in each hamlet of the GW affected villages and the norm of one handpump for every 150 persons should be achieved, by March '92. Apart from provision of safe drinking water supply, their maintenance should be ensured to yield continuous drinking water, especially during the transmission periods. It was also emphasised that while converting the priority unsafe drinking water sources (step-wells, tanks, ponds etc), PHED should ensure that (a) conversion is complete with removal of upper steps to prevent persons entry into the source, (b) sufficient pulleys, preferably with chain/rope and bucket are fixed for convenience of villagers in drawing the water and (c) converted sources should be regularly inspected for timely repairs/modifications. Mr M.M. Datta, Dy. adviser Plg. Commission, stressed that in order to implement the programme effectively, it is essential that PHE functionaries should maintain a very close liaison, through regular monthly meetings, with their counterparts in health departments, at all levels of GWEP.

The compiled information on guineaworm situation, safe drinking water supply position, GWEP implementation and major actions taken during 1991 as well as future plan of action under GWEP are detailed in this report.

One session on 10th January 1992 afternoon reviewed the quantum of work done by the twelve ESTs deployed by NICD, as highlighted through posters by Mr. G.C. Joshi and presented in details by Dr. N.G. Narayana and Dr. Z.C. Soni, the Epidemiologists of ESTs at Gulbarga (Karnataka) and Udaipur (Rajasthan), respectively. While appreciating the tremendous and valuable contributions by the ESTs, Chair-person Dr. .M.M. Gogna appealed to all the concerned state and district level Health and PHE authorities to continue to extend their full co-operation to these teams in order to further accelerate the existing momentum of GWEP. Dr. A.K. Bhoumick, Director CHEB, suggested that the states should make use of innovative community-educational methods to interrupt GW-transmission, especially in villages like Muttalgeri (Karnataka) & Remata (Andhra Pradesh).

The house resolved that the Recommendations of the 11th, 12th and 13th Task Force Meeting on GWEP are very exhaustive and hold good for their continued implementation during 1992 also. However, the additional recommendations were recorded and are given in this report.

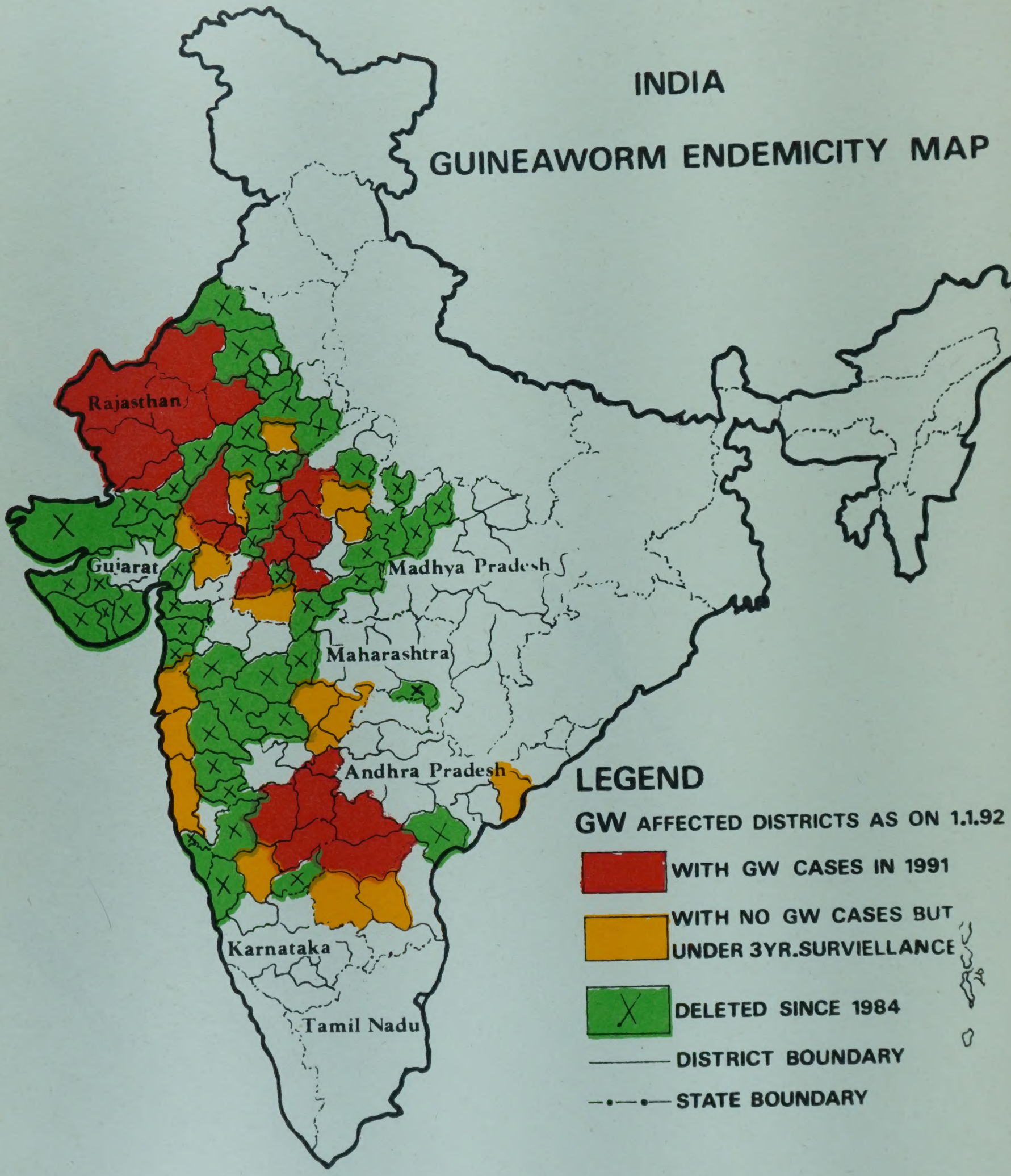
While concluding Dr.Verghese once again thanked all the distinguished guests and invitees for their valuable contributions during the meeting.

B

CURRENT GUINEAWORM DISEASE SITUATION IN INDIA

INDIA

GUINEAWORM ENDEMICITY MAP



B. CURRENT GUINEAWORM DISEASE SITUATION IN INDIA

The current Guineaworm disease situation in the country on the basis of the three active guineaworm case searches during 1991 is summarised in the tables 1(a & b) below.

Table 1a
State-wise Number of GW Affected Districts

GUINEAWORM ENDEMIC STATES	AFFECTED AS ON 1.1.91	DELETED IN 1991	AFFECTED AS ON 1.1.92
Andhra Pradesh	5	Nil	5
Gujarat	4	2	2
Karnataka	6	1	5
Madhya Pradesh	13	4	9
Maharashtra	9	3	6
Rajasthan	15	2	13
T O T A L	52	12	40

On 31st December 1991, twelve districts were deleted after 3 years of surveillance during which no guineaworm case was found. These districts include Panchmahal & Valsad in Gujarat; Belgaum in Karnataka; Mandsaur, Sagar, Shivpuri and Sehore in Madhya Pradesh; Beed, Osmanabad and Buldhana in Maharashtra; Sawai Madhopur and Sirohi in Rajasthan.

Only 22 districts in the country reported active GW cases during 1991, others were under surveillance. Ten districts alone contributed 92% of the total GW cases in the country in 1991, six of which are in Rajasthan. The distribution of 40 GW-affected districts as on 1.1.92, as per their GW endemicity, is detailed in table 2.

Table 1b
State-wise Gw Disease Situation

S.No	NAME OF THE AFFECTED DISTRICTS	GW CASES 1990	AS ON 1.1.1991 PHCs	VILL-AGES	POPULATION	NEWLY AFFECTED IN 1991 PHCs	VILL-AGES	POPUL-ATION	DELETED IN 1991 CASES	PHCs	VILL-AGES	POPUL-ATION	GW CASES 1991	AS ON 1.1.92 PHCs	VILL-AGES	POPUL-ATION
1.	Andhra Pradesh	224	22	88	258919	3	6	57514	7	3	25	63631	126	22	69	252802
2.	Gujarat	22	11	15	40858	Nil	Nil	Nil	Nil	7	10	31119	Nil	4	5	9739
3.	Karnataka	634	52	263	582925	Nil	20	26579	47	8	124	227679	226	44	159	381825
4.	Madhya Pradesh	333	51	485	659152	Nil	8	3395	27	17	201	154035	120	34	292	508512
5.	Maharashtra	209	67	190	180275	Nil	Nil	Nil	Nil	32	119	58625	Nil	35	71	121650
6.	Rajasthan	3376	70	1565	1212600	6	151	187287	368	12	406	409339	1712	64	1310	990549
	TOTAL	4798	273	2606	2934729	9	185	274775	449	79	885	944428	2185 *	203	1906	2265077

* includes one imported GW case detected in Tamil Nadu.
Increase in number of PHCs in Karnataka was due to subdivision of existing mother PHCs into smaller PHCs.

Only 576 villages reported active GW cases during 1991 viz. Andhra Pradesh (15), Karnataka (51), Madhya Pradesh (26) & Rajasthan (484).

It may be observed that the number of guineaworm cases reduced by 54% from 4798 in 1990 to 2185 in 1991. The States of Maharashtra and Gujarat achieved zero GW incidence status; whereas Karnataka and Madhya Pradesh achieved GW case reduction of 64% each followed by Rajasthan (49%) and Andhra Pradesh (44%) as compared to 1990.

TABLE - 2

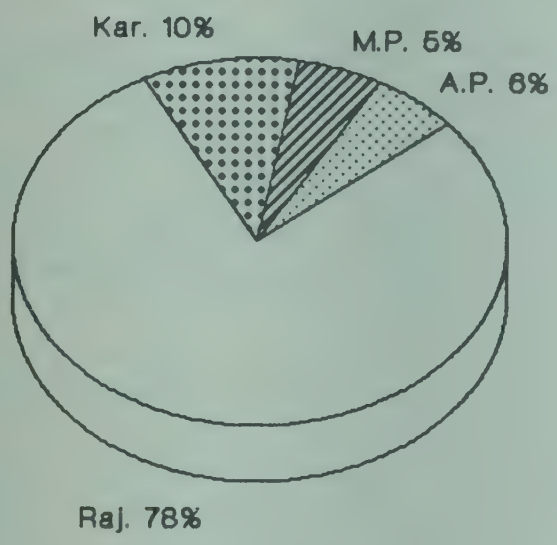
CLASSIFICATION OF GW ENDEMIC DISTRICTS AS ON 1.1.1992 ON THE BASIS OF NO. OF GW CASES IN 1991

TOTAL AFFECTED DISTRICTS - 40 ; TOTAL GW AFFECTED VILLAGES - 1906 ; TOTAL GW CASES - 2185

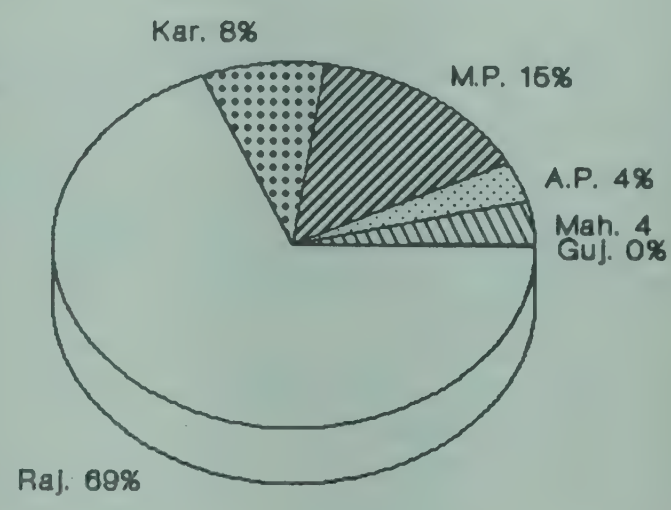
NO. OF CASES	NIL		1 - 10			11 - 50			51 - 100			101 - 200			201 - 500		
STATE	DISTRICT	VILLS.	DISTRICT	VILLS.	CASES	DISTRICT	VILLS.	CASES	DISTRICT	VILLS.	CASES	DISTRICT	VILLS.	CASES	DISTRICT	VILLS.	CASES
ANDHRA PRADESH	Ananthpur	3	Mahboobnagar	15	6							Kurnool	49	120			
	Cuddapah	1															
	West Godavari	1															
GUJARAT	Sabarkantha	4															
	Panchmahal	1															
KARNATAKA	Dharwad	1	Bidar	2	1	Gulbarga	90	48	Bijapur	14	75	Raichur	52	102			
MADHYA PRADESH	Jhabua	22	Ujjain	6	6	Rajgarh	150	24	Dhar	65	76						
	Guna	18	Shajapur	18	2	Dewas	11	12									
	Barwani	1															
	Vidisha	1															
MAHARASHTRA	Raigad	32															
	Thane	29															
	Ratnagiri	4															
	Nanded	2															
	Parbhani	2															
	Latur	2															
RAJASTHAN	Chittorgarh	2	Jalore	2	4	Barmer	56	31	Banswara	118	89	Jodhpur	30	153	Udaipur	455	489
	Tonk	1	Jaiselmer	2	1	Kota	12	21							Dungarpur	275	385
						Bikaner	6	18							Nagaur	63	294
															Jhalawar	288	227
* TOTAL	18	127	6	45	20	6	325	154	3	197	240	3	131	375	4	1081	1395
PERCENTAGE	45	6.7	15	2.4	0.9	15	17.1	7.0	7.5	10.3	11.0	7.5	6.9	17.2	10	56.7	63.8

* NOTE:- One additional imported GW case was reported from Tamil Nadu.

STATE-WISE DISTRIBUTION OF GW CASES 1991 AND AFFECTED VILLAGES AS ON 1.1.1992



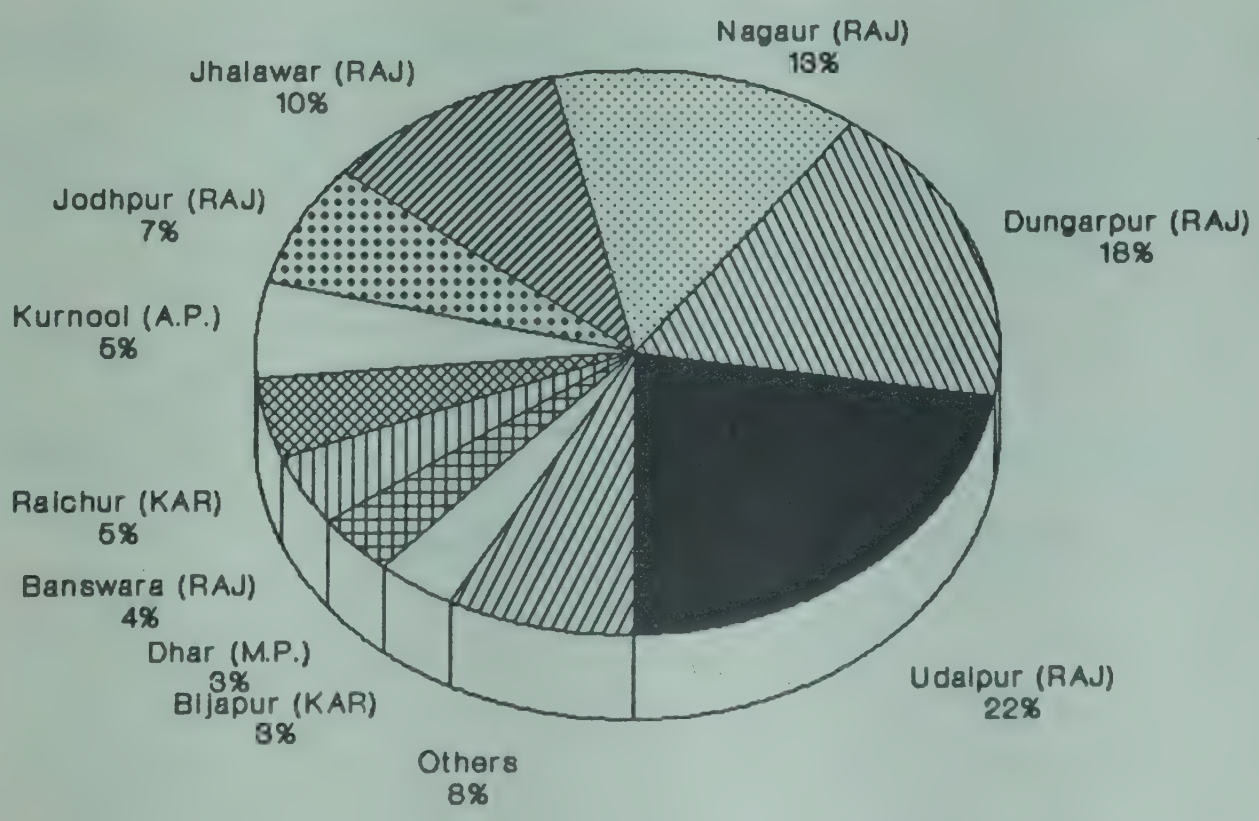
GW Cases



GW Affected Villages

One imported case reported
in Tamil Nadu

DISTRICT-WISE DISTRIBUTION OF GUINEAWORM CASES OF 1991



During 1991 the State of Rajasthan contributed 78% of total GW cases in India followed by Karnataka (10%), Andhra Pradesh and Madhya Pradesh (6% each). Tamil Nadu reported a single guineaworm case imported from Andhra Pradesh.

Likewise, the number of GW affected villages reduced by 27% from 2606 on 1.1.91 to 1906 on 1.1.92, and the population at risk reduced from 2.9 million (1.1.1991) in the country to 2.3 million (1.1.92). During 1991, 185 villages got newly affected or reinfected with guineaworm disease, of which 151 (82%) were in Rajasthan. On 1.1.92, Rajasthan accounts for 69% of the guineaworm affected villages in India, followed by Madhya Pradesh (15%), Karnataka (8%), Maharashtra and Andhra Pradesh (4% each).

During 1991, majority of guineaworm cases (65.5%) were detected by the month of June as shown in table 3 below:-

Table 3. GUINEAWORM CASES DETECTED IN DIFFERENT SEARCHES(1991)

S. NO.	NAME OF THE AFFECTED STATE	GUINEAWORM CASES DETECTED DURING SEARCH IN			TOTAL
		APRIL	JUNE	DEC	
1.	Andhra Pradesh	83	36	7	126
2.	Gujarat	Nil	Nil	Nil	Nil
3.	Karnataka	167	35	24	226
4.	Madhya Pradesh	15	56	49	120
5.	Maharashtra	Nil	Nil	Nil	Nil
6.	Rajasthan	580	458	674	1712
	T O T A L	845	586*	754	2185*
	PERCENTAGE	38.7%	26.8%	34.5%	100%

* includes one imported GW case in Tamil Nadu

The age and sex distribution shows that 57% GW cases were males, and 70% were adults. However amongst the children the disease occurred equally in males and females (Table 4).

Table 4. AGE & SEX DISTRIBUTION OF GUINEAWORM CASES DETECTED DURING 1991

S.No.	STATES	A D U L T			C H I L D			GRAND TOTAL
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	
1.	Andhra Pradesh	56	39	95	16	15	31	126
2.	Gujarat	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3.	Karnataka	97	68	165	33	28	61	226
4.	Madhya Pradesh	47	38	85	23	12	35	120
5.	Maharashtra	Nil	Nil	Nil	Nil	Nil	Nil	Nil
6.	Rajasthan	708	478	1186	257	269	526	1712
	T O T A L	908	624*	1532*	329	324	653	2185*
	PERCENTAGE	41.5%	28.5%	70%	15%	15%	30%	100%

* includes the imported case detected in Tamil Nadu was a female adult.

Table 5. DRINKING WATER SUPPLY POSITION IN GW AFFECTED VILLAGES AS ON 1.1.92.

S.No	NAME OF THE AFFECTED DISTRICTS	SAFE DRINKING WATER SOURCES					UNSAFE DRINKING WATER SOURCES					VILLAGES WITHOUT A SINGLE SAFE SOURCE	VILLAGES REQUIRING ADDITIONAL WATER SOURCES
		HAND PUMPS	DRAW WELLS	PIPED WATER	OTHER	TOTAL	STEP WELLS	PONDS	TANKS	OTHERS	TOTAL		
1.	Andhra Pradesh	769	240	44	Nil	1053	134	19	Nil	Nil	153	Nil	40
2.	Gujarat	63	246	Nil	Nil	309	302	3	Nil	Nil	305	Nil	Nil
3.	Karnataka	792	796	92	1	1681	298	18	16	Nil	332	4	87
4.	Madhya Pradesh	1142	1044	20	Nil	2206	340	245	7	6	598	Nil	Nil
5.	Maharashtra	153	558	44	Nil	755	116	1082	Nil	20	1218	6	Nil
6.	Rajasthan	6614	6671	277	19	13581	3668	395	74	27	4164	39	609
	TOTAL	9533	9555	477	20	19585	4858	1762	97	53	6770	49	736

The list of GW affected villages without even single safe drinking water source as well as those requiring additional safe water sources, have already been provided by State Dte. of Health/Medical Services to their respective State PHED during 1991, for provision of safe water supplies. The consolidated list of these villages was also forwarded by NICD to NDWM during 1991 for necessary action on priority.

Table 6. CONVERSION OF UNSAFE DRINKING WATER SOURCES DURING 1991.

S.No	NAME OF THE AFFECTED DISTRICTS	TARGET FOR CONVERSION DURING 1991-92			CONVERTED UPTO DEC.91			CONVERSION IN PROGRESS		
		S.W.*	OTHERS	TOTAL	S.W.	OTHERS	TOTAL	S.W.	OTHERS	TOTAL
1.	Andhra Pradesh	397	9	406	225	Nil	225	Nil	Nil	Nil
2.	Gujarat	has completed the targetted step well during 1989 -- 1990								
3.	Karnataka	105	Nil	105	65	Nil	65	15	Nil	15
4.	Madhya Pradesh	1248	2	1250	952	Nil	952	12	Nil	12
5.	Maharashtra	233	561	794	101	18	119	61	23	84
6.	Rajasthan	2569	Nil	2569	1651	Nil	1651	23	Nil	23
	TOTAL	4552	572	5124	2994	18	3012	111	23	134
	PERCENTAGE				66%	3%	59%	2.4%	4%	3%

* S.W. - STEP WELLS

The target for conversion of potential unsafe drinking water sources needs to be re-defined during 1992, excluding those villages which have been deleted in 1991 end, jointly by Health and PHE functionaries.

C. EPIDEMIOLOGICAL ACHIEVEMENTS OF GWEP

Table 1. GUINEAWORM ENDEMICITY IN INDIA (1984 & 1991)

The comparative guineaworm endemicity in the country in the beginning of GWEP (1984) and in 1991 is presented in the table below.

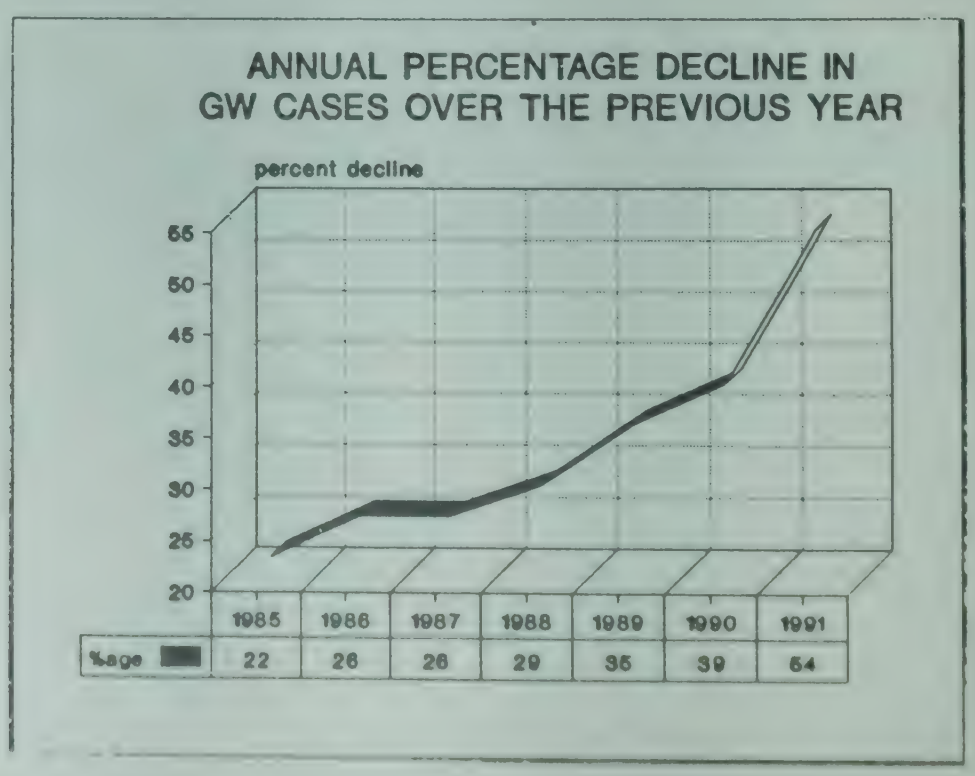
State S.No. **	NAME OF THE AFFECTED STATE	1984 DISTRICS	1984 PHCs	1984 VILLAGES	1984 POPULATION	1984 CASES	1991 DISTRICS	1991 PHCs	1991 VILLAGES	1991 POPULATION	1991 CASES
1.	Andhra Pradesh	6	54	1160	1566218	4461	5	22	69	252802	126
2.	Gujarat	13	56	444	1058012	426	2	4	5	9739	Nil
3.	Karnataka	8	73	991	1666123	5239	5	44	159	381825	226
4.	Madhya Pradesh	21	131	3647	2723934	11341	9	34	292	508512	120
5.	Maharashtra	15	99	1213	1058452	3115	6	35	71	121650	Nil
6.	Rajasthan	23	146	5376	4849340	15210	13	64	1310	990549	1712
7.	Tamil Nadu	3	5	9	10048	Nil	Deleted since 1984-85				* 1
	TOTAL	89	564	12840	12932127	39792	40	203	1906	2265077	2185
	PERCENTAGE DECLINE						55%	64%	85%	82%	95%

* one imported GW case from Andhra Pradesh detected in Tamil Nadu.

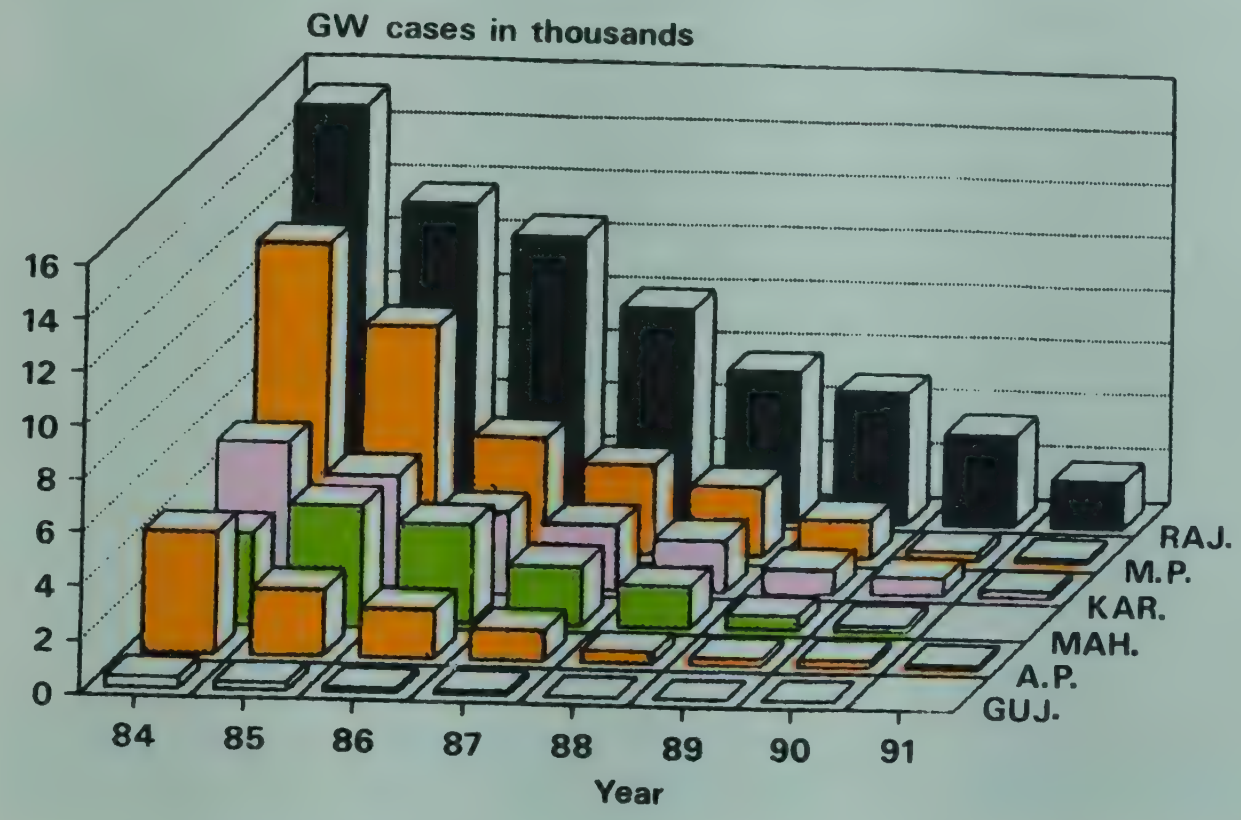
Table 2 GUINEAWORM AFFECTED VILLAGES/HAMLETS AND CASES (1984 to 1991).

State S.No. **	AFFECTED VILLAGE/HAMLETS 1984	1985	1986	1987	1988	1989	1990	1991	NUMBER OF GUINEAWORM CASES 1984	1985	1986	1987	1988	1989	1990	1991
1.	1160	741	599	414	241	150	88	69	4461	2389	1772	1122	407	224	224	126
2.	444	204	140	130	81	52	15	5	426	322	181	164	27	6	22	Nil
3.	991	715	662	398	356	271	249	159	5239	4035	2754	2405	1909	896	634	226
4.	3647	2855	1575	1170	867	825	485	292	11341	8349	4217	3285	2565	1408	333	120
5.	1213	902	853	767	475	289	190	71	3115	4211	3646	2159	1496	475	209	Nil
6.	5376	3394	3276	2755	2258	2009	1565	1310	15210	11644	10500	7896	5619	4872	3376	1712
7.	9	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1*
TOTAL	12840	8811	7102	5634	4278	3596	2592	1906	39792	30950	23070	17031	12023	7881	4798	2185*

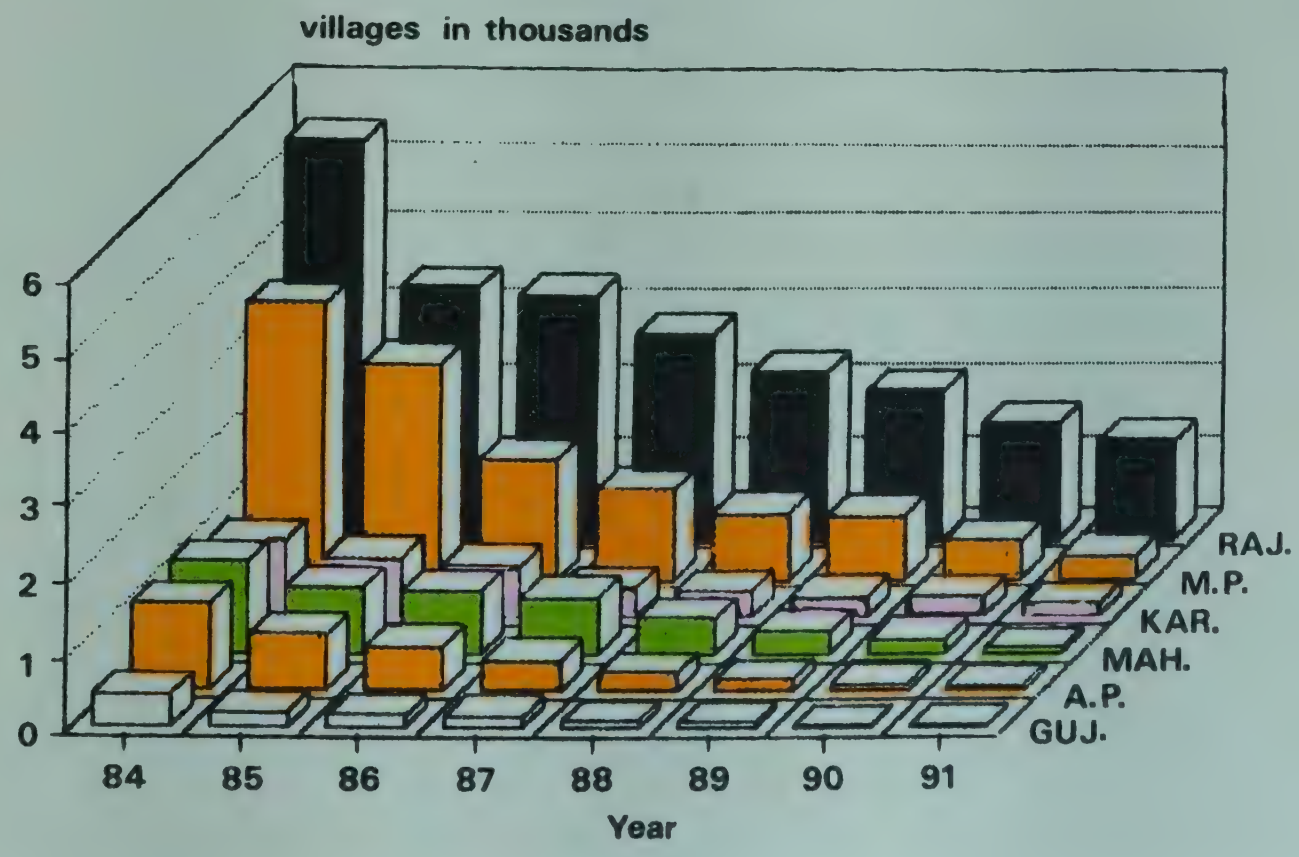
* one imported GW case detected in Tamil Nadu



STATE-WISE GUINEAWORM CASES IN INDIA FROM 1984 TO 1991



GUINEAWORM AFFECTED VILLAGES IN INDIA FROM 1984 TO 1991



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STATE-WISE GUINEAWORM DISEASE SITUATION

REPORT OF ANDHRA PRADESH

1. CURRENT GUINEAWORM DISEASE SITUATION

1.1 GUINEAWORM SITUATION AS ON 1.1.1992.

S.No	NAME OF THE AFFECTED DISTRICTS	GW CASES 1990	AS ON 1.1.1991 PHCs	AS ON 1.1.1991 VILLAGES	AS ON 1.1.1991 POPULATION	NEW/RE AFFECTED IN 1991 PHCs	NEW/RE AFFECTED IN 1991 VILLAGES	NEW/RE AFFECTED IN 1991 POPULATION	DELETED IN 1991 CASES *	DELETED IN 1991 PHCs	DELETED IN 1991 VILLAGES	DELETED IN 1991 POPULATION	GW CASES 1991	AS ON 1.1.92 PHCs	AS ON 1.1.92 VILLAGES	AS ON 1.1.92 POPULATION
1.	Kurnool	204	11	60	184247	Nil	3	8063	4	1	14	33734	120	10	49	158576
2.	Mahboobnagar	17	6	21	41521	3	3	49451	3	1	9	13165	6	8	15	77807
3.	Ananthpur	2	2	3	10015	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2	3	10015
4.	Cuddapah	1	1	1	900	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	1	900
5.	West Godavari	Nil	2	3	22236	Nil	Nil	Nil	Nil	1	2	16732	Nil	1	1	5504
	TOTAL	224	22	88	258919	3	6	57514	7	3	25	63631	126	22	69	252802

* GW cases in new/re-infected villages only.

This year again, of the 126 GW cases recorded during 1991 in the state, 120 (95%) were from district Kurnool only. Village 'Remata' of PHC Hussainapuram of district Kurnool, alone, contributed 104 (83%) GW cases in the state. Remata was also responsible for trasmitting GW infection to other villages in the district.

Only 15 villages reported active GW cases, all of which were epidemiologically investigated for identifying factors responsible for transmission and timely corrective measures required during 1991 (table 1.2).

1.2. ACTIVE CASE VILLAGES DURING 1991 & THEIR EPIDEMIOLOGICAL INVESTIGATION

S.No	NAME OF THE AFFECTED DISTRICTS	ACTIVE CASE VILLAGES OLD	ACTIVE CASE VILLAGES NEW	ACTIVE CASE VILLAGES RE-INF	ACTIVE CASE VILLAGES TOTAL	NUMBER OF ACTIVE CASE VILLAGES INVESTIGATED* OLD	NUMBER OF ACTIVE CASE VILLAGES INVESTIGATED* NEW	NUMBER OF ACTIVE CASE VILLAGES INVESTIGATED* RE-INF	NUMBER OF ACTIVE CASE VILLAGES INVESTIGATED* TOTAL
1.	Kurnool	7	Nil	3	10	7	Nil	3	10
2.	Mahboobnagar	2	3	Nil	5	2	3	Nil	5
3.	Ananthpur	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
4.	Cuddapah	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
5.	West Godavari	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	TOTAL	9	3	3	15	9	3	3	15

Of the 69 GW affected villages in the state as on 1.1.92, large majority are confined to Kurnool (71%) and Mahboobnagar (22%) districts that need very close attention, especially village Remata where conversion of one main step well is yet to be completed and sufficient number of alternative safe drinking water sources need to be provided on priority (table 1.3).

1.3. DISTRIBUTION OF AFFECTED VILLAGES AS ON 1.1.92

S.No	NAME OF THE AFFECTED DISTRICTS	VILLAGES UNDER SURVEILLANCE 1st Yr	2nd Yr	3rd Yr	TOTAL
1.	Kurnool	10	21	18	49
2.	Mahboobnagar	5	9	1	15
3.	Ananthpur	Nil	2	1	3
4.	Cuddapah	Nil	1	Nil	1
5.	West Godavari	Nil	Nil	1	1
	TOTAL	15	33	21	69

1.4. DRINKING WATER SUPPLY POSITION IN GW AFFECTED VILLAGES AS ON 1.1.92

As per the present norm of one safe drinking water for every 150 population, against the requirement of 1685 safe drinking water sources only 1053 (62%) exist in the 69 GW affected villages as on 1.1.92. A good number of villages & hamlets in Kurnool and Mahboobnagar require additional safe drinking water sources.

S.No	NAME OF THE AFFECTED DISTRICTS	SAFE DRINKING WATER SOURCES				UNSAFE DRINKING WATER SOURCES			VILLAGES WITHOUT A SINGLE SAFE SOURCE	VILLAGES/HAMLETS REQUIRING ADDITIONAL WATER SOURCES
		HAND PUMPS	DRAW WELLS	PIPED WATER	TOTAL	STEP WELLS	PONDS	TOTAL		
1.	Kurnool	358	149	33	540	111	10	121	Nil	31
2.	Mahboobnagar	225	74	7	306	14	1	15	Nil	6
3.	Ananthpur	17	6	2	25	6	2	8	Nil	3
4.	Cuddapah	3	1	1	5	3	Nil	3	Nil	Nil
5.	W. Godavari	166	10	1	177	Nil	6	6	Nil	Nil
	TOTAL	769	240	44	1053	134	19	153	Nil	40

The remaining 153 unsafe drinking water sources in the 69 affected villages need to be regularly treated with temephos during 1992.

2. GWEP - IMPLEMENTATION DURING 1991

2.1. GW CASE DETECTION & SURVEILLANCE

(a) COVERAGE DURING ACTIVE GUINEAWORM CASE SEARCHES

UNITS	TOTAL IN STATE	SEARCHED IN APRIL	SEARCHED IN JUNE	SEARCHED IN DECEMBER
DISTRICTS	23	21	22	22
PHCs	439	418	439	439
VILLAGES	31096	29366	31096	31096
POPULATION	6,37,65,041	5,65,81,141	5,89,60,385	5,89,60,385

(b) NUMBER OF VILLAGES CROSS CHECKED DURING ACTIVE SEARCHES

NO. OF VILLAGES CROSS CHECKED FOR SEARCH QUALITY		
APRIL	JUNE	DECEMBER
13,359 (43%)	15,295 (49.2%)	15,161 (48.7%)

(c) MONTHLY INCIDENCE OF GW CASES IN DISTRICTS

DISTRICTS	NO. OF GUINEAWORM CASES DETECTED											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Kurnool	5	6	24	46	25	11	Nil	3	Nil	Nil	Nil	Nil
Mahboobnagar	Nil	Nil	1	1	Nil	Nil	1	1	1	1	Nil	Nil
TOTAL	5	6	25	47	25	11	1	4	1	1	Nil	Nil

94% of the total GW cases in the state were reported uptill June.

(d) MONTHLY REPORTING OF GW CASES BY DISTRICTS TO NICD

Inspite of clear guidelines, only a few districts had sent the monthly GW Case Report.

TOTAL DISTT. IN STATE	TOTAL	NO. OF DISTTS. SUBMITTED MONTHLY REPORT IN 1991											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Endemic Districts	5	1	2	1	2	1	1	2	2	4	1	NR	NR
Non-Endemic Districts	18	NR	NR	NR	NR	NR	NR	2	6	6	6	5	1
TOTAL	23	1	2	1	2	1	1	4	8	10	7	5	1

It is again emphasised that all the districts in the state, irrespective of their GW endemicity should be advised to submit Monthly GW Evaluation Case Report, even if nil, to NICD regularly for surveillance and timely corrective measures.

2.2 GW CASE MANAGEMENT:-

Patients were managed by bandaging the ulcers and treating the complications whenever required.

2.3. TEMEPHOS TREATMENT OF UNSAFE DRINKING WATER SOURCES

About 84% of the recorded unsafe drinking water sources were treated sufficiently with temephos.

S.No	NAME OF THE AFFECTED DISTRICTS	NUMBER OF UNSAFE WATER SOURCES RECORDED	NUMBER OF UNSAFE WATER SOURCES TREATED WITH TEMEPHOS*						NO. OF VILLAGES MONITORED FOR TEMEPHOS APPLICATION	AMOUNT OF TEMEPHOS (Lts)	
			NEVER	1-2 TIMES	3-4 TIMES	5-6 TIMES	7-8 TIMES	>8 TIMES		CONSUMED DURING THE YEAR	BALANCE AT THE END OF YEAR
1.	Kurnool	74	Nil	3	9	37	15	10	32	318	107
2.	Mahboobnagar	21	Nil	1	Nil	2	16	2	16	105	40
3.	Ananthpur	6	Nil	1	Nil	5	Nil	Nil	3	26	Nil
4.	Cuddapah	3	Nil	Nil	Nil	Nil	Nil	3	1	10	Nil
5.	West Godavari	3	Nil	1	2	Nil	Nil	Nil	1	45	Nil
	TOTAL	107	Nil	6	11	44	31	15	53	504	147

2.4. STRAINERS DISTRIBUTED

NUMBER COVERED FOR DISTRIBUTION IN STATE				NO. OF STRAINERS	
DISTRICTS	PHCs	VILLAGES	HOUSEHOLDS	DISTRIBUTED	BALANCE
Kurnool	6	13	7149	4600	1100
Mahboobnagar	2	8	4697	1910	500
TOTAL	8	21	11846	6510	1600

It has been observed by the state that the average life of strainer was 6-8 months and the utilization rate of strainers was 73% in households using unsafe drinking water.

2.5. HEALTH EDUCATION

(a) QUANTITY OF HEALTH EDUCATION MATERIAL UTILISED IN ENDEMIC DISTRICTS

S.No.	NAME OF THE AFFECTED DISTRICTS	HEALTH EDUCATION MATERIAL						
		TIN PLATES	PAPER POSTER	FOLDERS	STICKERS	PLASTIC CARDS	RECOGNITION CARDS	DISPLAY CARDS
1.	Kurnool	300	2000	5000	1000	500	200	Nil
2.	Mahboobnagar	275	2200	3000	1200	900	Nil	Nil
3.	Ananthpur	100	2000	6900	1500	700	Nil	Nil
4.	Cuddapah	100	1500	500	550	600	Nil	Nil
5.	West Godawari	100	2600	5500	1200	600	Nil	Nil
	TOTAL	875	10300	20900	5450	3300	200	Nil

(b) HEALTH EDUCATION ACTIVITIES UNDERTAKEN IN ENDEMIC DISTRICTS

S.No.	NAME OF THE AFFECTED DISTRICTS	NO. OF HEALTH EDUCATION ACTIVITIES UNDERTAKEN				
		GROUP TALKS	FILM SHOWS	THEATRE SLIDES	WALL STENCILS	AWARENESS CAMPS
1.	Kurnool	1105	65	6	204	Nil
2.	Mahboobnagar	2715	Nil	Nil	257	Nil
3.	Ananthpur	176	3	Nil	28	Nil
4.	Cuddapah	9700	Nil	Nil	50	80
5.	West Godawari	240	Nil	Nil	Nil	Nil
	TOTAL	13936	68	6	539	80

(c) GUINEAWORM EDUCATION DAY CELEBRATION (APRIL '91)

Level of celebrations	number celebrated
Districts	3
PHCs	7
Villages	46

Considering the proven need & cost-effectiveness of community education & its involvement for GW eradication, the GW Health education programmes need to be further intensified in the whole state, especially in endemic districts, on priority.

2.6. TRAINED MANPOWER DEVELOPMENT UNDER GWEP.

S.No	NAME OF THE AFFECTED DISTRICTS	DHO		MO		HA		MPW		NO. OF PERSONS TRAINED DURNG 1991					NUMBER OF PERSONS REMAINING UNTRANED					
		SANCT	POS	SANCT	POS	SANCT	POS	SANCT	POS	MOs	HEOs	HAs	MPWs	PHEs	DHOs	MOs	HEO	HAs	MPWs	PHEs
1.	Kurnool	1	1	137	124	216	216	748	475	13	1	55	160	Nil	Nil	3	Nil	6	9	UT
2.	Mahboobnagar	1	1	19	8	16	14	96	90	2	3	10	48	68	1	Nil	Nil	2	40	Nil
3.	Ananthpur	1	1	9	5	12	11	90	77	3	1	11	55	Nil	Nil	2	Nil	1	12	UT
4.	Cuddapah	1	1	1	1	3	2	15	15	1	1	2	15	Nil	1	Nil	Nil	Nil	Nil	UT
5.	W. Godawari	1	1	1	1	4	4	13	13	1	1	4	13	Nil	1	Nil	Nil	Nil	Nil	UT
	TOTAL	5	5	167	139	251	247	962	670	20	7	82	291	68	3	5	Nil	9	61	Nil

Abbreviation : HEO - Health Education/Media Officer, HA - Health Assistants/supervisors/inspectors
PHE - Public Health Engineers, DHO - District level Health Officer, MO - Medical Officer
SANCT - SANCTIONED, POS - IN POSITION, UT - UNTRAINED

Efforts should be made by the state/Districts to (1) fill the vacant post of Medical Officers of PHC (17%), and Multi-purpose workers (30%) and (2) continuously train the number of untrained PHC medical & para-medical, Health education functionaries & PHEs as per teaching modules already provided by NICD.

Dr. Innaiha informed the house that the problem village 'Remata' was thoroughly investigated by Epidemiological Surveillance Team of NICD, stationed at Kurnool, and corrective measures were taken promptly. The private owned step well in the village has been acquired by the Dist. Collector & is under conversion. The unsafe water sources around the village have been identified & treated with temephos along with other measures like strainer distribution & community education. A separate monitoring team under a unit officer has been provided exclusively for GWEP in Kurnool district, under the overall supervision of DMHO, in order to implement the GWEP efficiently to achieve its objectives.

REPORT OF GUJARAT

1. CURRENT GUINEAWORM DISEASE SITUATION

1.1 GUINEAWORM SITUATION AS ON 1.1.92.

S.No	NAME OF THE AFFECTED DISTRICTS	GW CASES 1990	AS ON 1.1.1991 PHCs	VILLAGES	POPULATION	NEW/RE AFFECTED IN 1991 PHCs	VILLAGES	POPULATION	DELETED IN 1991 CASES	PHCs	VILLAGES	POPULATION	GW CASES 1991	AS ON 1.1.92 PHCs	VILLAGES	POPULATION
1.	Sabarkantha	21	5	8	6700	Nil	Nil	Nil	Nil	2	4	2719	Nil	3	4	3981
2.	Panchmahals	Nil	3	4	14872	Nil	Nil	Nil	Nil	2	3	9114	Nil	1	1	5758
3.	Valsad	1	2	2	18618	Nil	Nil	Nil	Nil	2	2	18618	Nil	Deleted in Dec 91		
4.	Banaskantha	Nil	1	1	668	Nil	Nil	Nil	Nil	1	1	668	Nil	Deleted in dec 91		
	TOTAL	22	11	15	40858	Nil	Nil	Nil	Nil	7	10	31119	Nil	4	5	9739

In 1991, no guineaworm case was detected in the state of Gujarat, and two districts, 7 PHCs and 10 villages were deleted from the endemic list.

1.2 DISTRIBUTION OF GW AFFECTED VILLAGES AS ON 1.1.92

S.No	NAME OF THE AFFECTED DISTRICTS	VILLAGES UNDER SURVEILLANCE 1st Yr	2nd Yr	3rd Yr	TOTAL
1.	Sabarkantha	Nil	4	Nil	4
2.	Panchmahals	Nil	Nil	1	1
	TOTAL	Nil	4	1	5

1.3. DRINKING WATER SUPPLY POSITION IN GW AFFECTED VILLAGES AS ON 1.1.92.

S.No	NAME OF THE AFFECTED DISTRICTS	SAFE DRINKING WATER SOURCES HAND PUMPS	DRAW WELLS	PIPED WATER	TOTAL	UNSAFE DRINKING WATER SOURCES STEP WELLS*	PONDS	TOTAL	VILLAGES WITHOUT A SINGLE SAFE SOURCE	VILLAGES REQUIRING ADDITIONAL WATER SOURCES
1.	Sabarkantha	20	45	Nil	65	35	Nil	35	Nil	Nil
2.	Panchmahals	43	201	Nil	244	267	3	270	Nil	Nil
	TOTAL	63	246	Nil	309	302	3	305	Nil	Nil

* Mostly irrigation wells.

2. GWEP - IMPLEMENTATION DURING 1991

2.1. GW CASE DETECTION & SURVEILLANCE

(a) COVERAGE DURING ACTIVE GUINEAWORM CASE SEARCHES

UNITS	TOTAL IN STATE	SEARCHED IN APRIL	SEARCHED IN JUNE	SEARCHED IN DECEMBER
DISTRICTS	19	19	19	19
PHCs	887	887	887	887
VILLAGES	18476	18476	18476	18476
POPULATION	3,10,87,857	3,10,87,857	3,02,25,762	2,88,02,783

The state also conducted searches during April, June and December in the six municipal corporation of Ahmedabad, Vadodara, Surat, Rajkot, Bhavnagar and Jamnagar.

(b) NUMBER OF VILLAGES CROSS CHECKED DURING ACTIVE SEARCHES

NO. OF VILLAGES CROSS CHECKED FOR SEARCH QUALITY		
APRIL	JUNE	DECEMBER
7,570 (41%)	7,622 (41.3%)	8,534 (46%)

(c) MONTHLY REPORTING OF GW CASES BY DISTRICTS TO NICD.

TOTAL DISTT. IN STATE	TOTAL	NO. OF DISTTS. SUBMITTED MONTHLY REPORT IN 1991											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Endemic Districts	4	3	3	3	1	1	NR	4	2	3	2	NR	2
Non-Endemic Districts	15	5	3	3	3	5	3	7	4	3	5	4	3
TOTAL	19	8	6	6	4	6	3	11	6	6	7	4	5

Though the state might have received, these monthly surveillance reports were not received from many districts by NICD regularly. At this juncture it is essential that the monthly GW case reports even if nil, must be sent by all districts to NICD, regularly for surveillance & evaluation.

2.3 TEMEPHOS TREATMENT OF UNSAFE DRINKING WATER SOURCES.

S.No	NAME OF THE AFFECTED DISTRICTS	NUMBER OF UNSAFE WATER SOURCES RECORDED	NUMBER OF UNSAFE WATER SOURCES TREATED WITH TEMEPHOS*						AMOUNT OF TEMEPHOS IN LITRES	
			NEVER	1-2 TIMES	3-4 TIMES	5-6 TIMES	7-8 TIMES	>8 TIMES	CONSUMED DURING THE YEAR	BALANCE AT THE END OF YEAR
1.	Saberkantha	157	Nil	21	102	34	Nil	Nil	63	12
2.	Panchmahals	16	Nil	8	Nil	8	Nil	Nil	50	10
3.	Valsad	6	Nil	Nil	Nil	6	Nil	Nil	1	Nil
4.	Banaskantha	58	Nil	10	19	29	Nil	Nil	8	2
	TOTAL	237	Nil	39	121	77	Nil	Nil	122	24

Unsafe water sources in the villages bordering the highly endemic districts of Rajasthan (Udaipur & Dungarpur) were also covered for temephos application. During the year 100 Lts. of spare Temephos was sent

to Rajasthan.

It is emphasised that all the unsafe drinking water sources in GW affected villages as on 1.1.92 should continue to be treated with temephos till they are deleted.

2.4 STRAINERS DISTRIBUTED.

NUMBER COVERED FOR DISTRIBUTION IN STATE				NO. OF STRAINERS	
DISTRICTS	PHCs	VILLAGES	HOUSEHOLDS	DISTRIBUTED	BALANCE
Ssbarkantha	5	12	4350	4350	Nil
Valsad	2	3	800	800	Nil
TOTAL	7	15	5150	5150	Nil

2.5. HEALTH EDUCATION

(a) QUANTITY OF HEALTH EDUCATION MATERIAL UTILISED.

S.No.	NAME OF THE AFFECTED DISTRICTS	HEALTH EDUCATION MATERIAL						
		CASSETTES	PAPER POSTER	FOLDERS	SLIDE	MODULES TEACHING	G.W.E.P. BOOKS	DISPLAY CARDS
1.	Sabarkantha	1	250	10000	2	1	1	250
2.	Panchmahals	1	250	5000	2	1	12	250
2.	Valsad	1	250	5000	Nil	1	Nil	250
3.	Banaskantha	1	250	10000	Nil	1	12	250
	TOTAL	4	1000	30000	4	4	25	1000

(b) HEALTH EDUCATION ACTIVITIES UNDERTAKEN DURING 1991 IN ENDEMIC DISTRICTS.

S.No.	NAME OF THE AFFECTED DISTRICTS	NO. OF HEALTH EDUCATION ACTIVITIES UNDERTAKEN					
		GROUP TALKS	FILM SHOWS	H.E.IN P/SCHOOL	SLIDE SHOW	SHIBIRS	VIDEO SHOWS
1.	Sabarkantha	684	3	3778	97	458	11
2.	Panchmahals	500	25	369	25	20	13
3.	Valsad	13846	Nil	259	21	390	25
4.	Banaskantha	810	2	263	8	12	10
	TOTAL	15840	30	4669	151	880	59

In addition to the above 4 affected districts, health education activities were conducted in other non-endemic districts and municipal corporations.

(c) GUINEAWORM EDUCATION DAY CELEBRATION (APRIL '91)

Level of celebrations	number celebrated
Districts	19
PHCs	993
Sub-centres	7284
Villages	18114

2.6 TRAINED MANPOWER DEVELOPMENT UNDER GWEP.

S.No	NAME OF THE AFFECTED DISTRICTS	DHO		MO		HA		MPW		NO. OF PERSONS TRAINED DURNG 1991					NUMBER OF PERSONS REMAINING UNTRAINED					
		SANCT	POS	SANCT	POS	SANCT	POS	SANCT	POS	MOs	HEOs	HAs	MPWs	PHEs	DHOs	MOs	HEOs	HAs	MPWs	PHEs
1.	Sabarkantha	1	1	63	48	102	102	634	634	48	Nil	102	634	Nil	1	Nil	Nil	Nil	Nil	Nil
2.	Panchmahals	1	1	112	78	155	138	903	901	78	Nil	138	901	Nil	1	Nil	Nil	Nil	Nil	Nil
3.	Valsad	1	1	80	63	168	165	823	823	63	Nil	165	823	Nil	Nil	Nil	Nil	Nil	Nil	Nil
4.	Banaskantha	1	1	86	76	71	67	561	560	76	Nil	67	560	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	TOTAL	4	4	341	265	496	472	2921	2918	265	Nil	472	2918	68	2	Nil	Nil	Nil	Nil	Nil

Abbreviation : HEO - Health Education/Media Officer, HA - Health Assistants/supervisors/inspectors
PHE - Public Health Engineers, DHO - District level Health Officer, MO - Medical Officer
SANCT - SANCTIONED, POS - IN POSITION

The MPWs and PHEs remaining untrained should be trained immediately.

It was also discussed and agreed that both the states, Gujarat and Rajasthan, will have frequent border meetings to draw action plan to prevent importation of infection from Rajasthan to Gujarat, and will promptly send the minutes of such meetings to NICD Delhi.

REPORT OF KARNATAKA

1. CURRENT GUINEAWORM DISEASE SITUATION

1.1 GW SITUATION AS ON 1.1.1992.

S.No	NAME OF THE AFFECTED DISTRICTS	GW CASES 1990	AS ON 1.1.1991 PHCs	VILL-AGES	POPULATION	NEWLY AFFECTED IN 1991 PHCs	VILL-AGES	POPUL-ATION	CASES **	DELETED IN 1991 PHCs	VILL-AGES	POPUL-ATION	GW CASES 1991	AS ON 1.1 1992 PHCs	VILL-AGES	POPUL-ATION
1.	Raichur	162	11	57	82442	Nil	12	8934	25	1	17	27136	102	10	52	64240
2.	Bijapur	245	9	23	77850	Nil	1	11166	8	1	10	34215	75	8	14	54801
3.	Gulbarga	227	28	177	419080	Nil	6	4923	13	5	93	163782	48	23	90	260221
4.	Bidar	Nil	2	3	1589	Nil	1	1556	1	Nil	2	816	1	2	2	2329
5.	Dharwad	Nil	1	2	1398	Nil	Nil	Nil	Nil	Nil	1	1164	Nil	1	1	234
6.	Belgaum	Nil	1	1	566	Nil	Nil	Nil	Nil	1	1	566	Nil	Deleted in Dec 91		
	TOTAL	634	52*	263*	582925	Nil	20	26579	47	8	124	227679	226	44	159	381825

* The increase in number of PHC si due to subdivision of earlier PHCs.

** GW cases in new/re-infected villages only.

A total of 226 guineaworm cases were recorded in the state during 1991, from districts of, Raichur (45%), Bijapur (33%), Gulbarga (21%) and a single case from Bidar. Of the total 159 guineaworm affected villages in the state as on 1.1.92, only 51 villages reported active guineaworm cases. Four villages alone accounted for 51% GW cases in the state viz., Muttalgeri (58) in Bijapur, Gugerdoddi (38), Kurlerdoddi (10) and Kuppagaldoddi (10) in Raichur.

As compared to 1990, there was a decline of 64% in guineaworm cases and 40% in affected villages, during 1991. One district Belgaum, 8 PHCs and 124 villages were deleted after being free from guineaworm disease for three consecutive years (Table 1.1).

Of the 51 villages reporting active guineaworm cases, 38 (75%) were epidemiologically investigated, mostly by Epidemiological Surveillance Teams of NICD, to identify factors responsible for transmission and for timely corrective measures (Table 1.2).

1.2. ACTIVE CASE VILLAGES DURING 1991 & THEIR EPIDEMIOLOGICAL INVESTIGATION.

S.No	NAME OF THE AFFECTED DISTRICTS	ACTIVE CASE VILLAGES OLD	NEW	RE-INF	TOTAL	NUMBER OF ACTIVE CASE VILLAGES INVESTIGATED OLD	NEW	RE-INF	TOTAL
1.	Raichur	15	9	3	27	15	9	3	27
2.	Bijapur	4	Nil	1	5	4	Nil	1	5
3.	Gulbarga	12	5	1	18	4	1	Nil	5
4.	Bidar	Nil	1	Nil	1	Nil	1	Nil	1
5.	Dharwad	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
6.	Belgaum	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	TOTAL	31	15	5	51	23	11	4	38

The distribution of 159 GW affected villages as on 1.1.92 is shown in table 1.3, which indicates that large number of these villages are in three districts only viz. Gulbarga (57%) Raichur (33%) and Bijapur (9%).

1.3 DISTRIBUTION OF AFFECTED VILLAGES AS ON 1.1.92

S.No	NAME OF THE AFFECTED DISTRICTS	VILLAGES UNDER SURVEILLANCE			
		1st Yr	2nd Yr	3rd Yr	TOTAL
1.	Raichur	27	13	12	52
2.	Bijapur	5	4	5	14
3.	Gulbarga	18	24	48	90
4.	Bidar	1	Nil	1	2
5.	Dharwad	Nil	Nil	1	1
	TOTAL	51	41	67	159

1.4 DRINKING WATER SUPPLY POSITION IN GW AFFECTED VILLAGES AS ON 1.1.92

As per the norm of 1 safe drinking water source for 150 persons, there is need of 2546 safe drinking water sources in 159 guineaworm affected villages as on 1.1.92. However, only 66% of the required safe drinking water source exist in the affected villages. Three villages/hamlets viz., MSM Camp in Gulbarga, Kurlerdoddi, Kempugudda, Kuppagaldoddi in Raichur are without a single safe drinking water source. Another 87 GW affected villages, mostly in Gulbarga & Raichur, need additional safe drinking water sources.

S.No	NAME OF THE AFFECTED DISTRICTS	SAFE DRINKING WATER SOURCES					UNSAFE WATER SOURCES				VILLAGES WITHOUT A SINGLE SAFE SOURCE	VILLAGES REQUIRING ADDITIONAL WATER SOURCES
		HAND PUMPS	DRAW WELLS	PIPED WATER	OTHER	TOTAL	STEP WELLS	PONDS	TANKS	TOTAL		
1.	Raichur	95	147	15	Nil	257	100	12	5	117	3	17
2.	Bijapur	110	55	13	Nil	178	26	1	1	28	Nil	2
3.	Gulbarga	577	588	63	1	1229	168	2	9	179	1	67
4.	Bidar	9	5	1	Nil	15	3	3	1	7	Nil	1
5.	Dharwad	1	1	Nil	Nil	2	1	Nil	Nil	1	Nil	Nil
	TOTAL	792	796	92	1	1681	298	18	16	332	4	87

All the recorded 332 unsafe water sources mostly in the guineaworm affected villages in districts of Raichur, Gulbarga and Bijapur need to be regularly treated with temephos during 1992.

2. GWEP - IMPLEMENTATION DURING 1991

2.1 GW CASE DETECTION & SURVEILLANCE

(a) COVERAGE DURING ACTIVE GUINEAWORM CASE SEARCHES

UNITS	TOTAL IN STATE	SEARCHED IN APRIL	SEARCHED IN JUNE	SEARCHED IN DECEMBER
DISTRICTS	20	20	20	20
PHCs	1148	1148	1148	1148
VILLAGES	27024	27024	27024	27024
POPULATION	3,71,36,000	3,71,36,000	3,71,36,000	3,71,36,000

(b) NUMBER OF VILLAGES CROSS CHECKED DURING SEARCH

NO. OF VILLAGES CROSS CHECKED FOR SEARCH QUALITY		
APRIL	JUNE	DECEMBER
14,926 (55%)	13,717 (51%)	15,294 (57%)

(c)MONTHLY INCIDENCE OF GW CASES

89% of the total GW cases in the state were recorded upto June.

DISTRICTS	NO. OF GUINEAWORM CASES DETECTED											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Raichur	3	8	10	60	Nil	18	Nil	1	Nil	2	Nil	Nil
Bijapur	Nil	2	18	27	7	7	3	5	5	1	Nil	Nil
Gulbarga	6	4	3	26	Nil	3	Nil	1	1	Nil	Nil	4
Bidar	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	Nil	Nil	Nil
TOTAL	9	14	31	113	7	28	3	7	7	3	Nil	4

(d) MONTHLY REPORTING OF GW CASES BY DISTRICTS TO NICD

Only some of the non-endemic districts submitted monthly GW case reports to NICD regularly.

TOTAL DISTT. IN STATE	TOTAL	NO. OF DISTTS. SUBMITTED MONTHLY REPORT IN 1991											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Endemic Districts	6	5	4	5	5	5	5	5	4	4	4	2	4
Non-Endemic Districts	11	6	6	7	6	7	6	6	5	5	5	3	5
TOTAL	17	11	10	12	11	12	11	11	9	9	9	5	9

It is emphasised that all the districts in the state, irrespective of their guineaworm endemicity, should be advised to submit monthly guineaworm case report, even nil, regularly for surveillance & evaluation.

2.2 GUINEAWORM CASE MANAGEMENT

Most of the guineaworm cases were managed by regular bandaging.

2.3 TEMEPHOS TREATMENT OF UNSAFE DRINKING WATER SOURCES.

S.No	NAME OF THE AFFECTED DISTRICTS	NUMBER OF UNSAFE WATER SOURCES		NUMBER OF UNSAFE WATER SOURCES TREATED WITH TEMEPHOS						NO. OF VILLAGES MONITORED FOR TEMEPHOS APPLICATION	AMOUNT OF TEMEPHOS	
		RECORDED	TARGETTED	NEVER	1-2 TIMES	3-4 TIMES	5-6 TIMES	SEVEN TIMES	EIGHT TIMES		CONSUMED DURING THE YEAR	BALANCE AT THE END OF YEAR
3.	Raichur	117	60	Nil	Nil	Nil	Nil	Nil	60	21	250 Ltrs.	20 Ltrs.
1.	Bijapur	28	18	Nil	Nil	Nil	Nil	Nil	18	12	233 Ltrs.	Nil
2.	Gulbarga	179	46	Nil	1	Nil	Nil	Nil	45	10	390 Ltrs.	Nil
	TOTAL	324	124	Nil	1	Nil	Nil	Nil	123	43	873 Ltrs.	20 Ltrs.

Of the 324 existing unsafe drinking water sources, only 124 sources were targetted for temephos application of which 123 received eight applications. It is advisable that all unsafe drinking water sources in GW affected villages should be targetted for Temephos application to interrupt transmission during 1992.

2.4 STRAINERS DISTRIBUTED.

NUMBER COVERED FOR DISTRIBUTION IN STATE				NO. OF STRAINERS	
DISTRICTS	PHCs	VILLAGES	HOUSEHOLDS	DISTRIBUTED	BALANCE
Raichur	8	27	6000	6000	9000
Bijapur	7	9	3650	7700	2300
Gulbarga	10	10	7000	7000	1000
T O T A L	25	46	16650	20700	12300

2.5 HEALTH EDUCATION

(a) QUANTITY OF HEALTH EDUCATION MATERIAL UTILISED.

S.No.	NAME OF THE AFFECTED DISTRICTS	HEALTH EDUCATION MATERIAL					
		Hand Bills	G.W. case Recog. Cards	Wall Posters	Flash Cards	Video Cassette	Projection Slides
1.	Raichur	25000	1500	Nil	925	Nil	Nil
2.	Bijapur	25000	2000	Nil	500	7	4
3.	Gulbarga	25000	1500	Nil	400	Nil	Nil
4.	Bidar	10000	1500	Nil	Nil	Nil	Nil
	T O T A L	85000	6500	Nil	1825	7	4

(b) HEALTH EDUCATION ACTIVITIES UNDERTAKEN.

S.No.	NAME OF THE AFFECTED DISTRICTs	NO. OF HEALTH EDUCATION ACTIVITIES UNDERTAKEN					
		Group Meetings	School Health Education	Film Shows	Exhibitions	Mass Meetings	Wall Slogan
1.	Raichur	3432	365	6	365	Nil	245
2.	Bijapur	6345	981	7	20	5	100
3.	Gulbarga	8233	1341	Nil	136	625	150
	TOTAL	18010	2687	13	521	630	495

(c) GUINEAWORM EDUCATION DAY CELEBRATION (APRIL '91)

Level of celebrations	number celebrated
Districts	4
PHCs	101
Sub-centres	93
Villages	194

Inspite of directives & guidelines, it is observed that GW education day has not been celebrated in its full perspective, in the state during 1991. It is suggested that GED should be celebrated in all the districts, PHCs & sub-centres of state, during 1992 onwards for better community awareness and early GW case detection and to seek community participation in GW eradication.

Considering the proven need & cost-effectiveness of community education & its involvement for GW eradication, the GW Health education programmes need to be further intensified in the whole state, especially in endemic districts, on priority.

2.6 TRAINED MANPOWER DEVELOPMENT UNDER GWEP.

S.No	NAME OF THE AFFECTED DISTRICTS	DHO		MO		HA		MPW		NO. OF PERSONS TRAINED DURING 1991					NUMBER OF PERSONS REMAINING UNTRAINED					
		SANCT	POS	SANCT	POS	SANCT	POS	SANCT	POS	MOs	HEOs	HAs	MPWs	PHEs	DHOs	MOs	HEOs	HAs	MPWs	PHEs
1.	Raichur	1	1	92	81	139	72	760	628	10	4	17	143	Nil	Nil	71	2	55	485	Nil
2.	Bijapur	1	1	90	85	510	510	735	735	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
3.	Gulbarga	1	1	130	112	142	85	945	745	92	18	69	595	Nil	Nil	20	5	130	152	Nil
	TOTAL	3	3	312	278	791	667	2440	2108	102	22	86	738	Nil	Nil	91	7	185	637	Nil

Abbreviation : HEO - Health Education/Media Officer, HA - Health Assistants/supervisors/inspectors
PHE - Public Health Engineers, DHO - District level Health Officer, MO - Medical Officer
SANCT - SANCTIONED, POS - IN POSITION

Efforts should be made by the state to (1) fill the vacant posts of Medical Officers of PHC (11%), Health Asstt/Supervisors (16%) and Multi-purpose workers (14%) and (2) train the large number of untrained, MOs, and MPWs as per teaching modules already provided by NICD.

Village 'Muttalgeri' in district Bijapur, which alone contributed 58 guineaworm cases during 1991, was again discussed with reference to action plan for this village which has a very big pond, the only source of drinking water in the village. Realising the difficulties of treating such a big water source with temephos, it was suggested that alternative methods for providing potable drinking water to the people explored and provided immediately. Innovative community educational approaches must be adopted to interrupt GW-transmission.

The state should hold meetings with GW endemic bordering states to draw action-plan to prevent inter-state transmission of GW-disease.

REPORT OF MADHYA PRADESH

1. CURRENT GUINEAWORM DISEASE SITUATION

1.1 GUINEAWORM SITUATION AS ON 1.1.1992.

S.No	NAME OF THE AFFECTED DISTRICTS	GW CASES 1990	AS ON 1.1.1991 PHCs	VILL-AGES	POPULATION	NEWLY AFFECTED IN 1991 PHCs	VILL-AGES	POPUL-ATION	CASES *	DELETED IN 1991 PHCs	VILL-AGES	POPUL-ATION	GW CASES 1991	AS ON 1.1.1992 PHCs	VILL-AGES	POPUL-ATION
1.	Dhar	95	11	62	94682	Nil	3	1592	10	Nil	Nil	Nil	76	11	65	96274
2.	Rajgarh	124	6	245	408457	Nil	4	1300	11	Nil	99	67672	24	6	150	342085
3.	Dewas	14	4	12	9104	Nil	1	503	6	2	2	2153	12	2	11	7454
4.	Ujjain	65	2	7	5781	Nil	Nil	Nil	Nil	1	1	331	6	1	6	5450
5.	Shajapur	23	6	28	34724	Nil	Nil	Nil	Nil	2	10	6779	2	4	18	27945
6.	Jhabua	3	9	90	76361	Nil	Nil	Nil	Nil	3	68	60746	Nil	6	22	15615
7.	Guna	3	2	18	11775	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2	18	11775
8.	Barwani	Nil	2	3	2934	Nil	Nil	Nil	Nil	1	2	1700	Nil	1	1	1234
9.	Vidisha	6	1	1	680	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	1	680
10.	Sagar	Nil	4	11	1678	Nil	Nil	Nil	Nil	4	11	1678	Nil	Deleted in Dec 91		
11.	Sehore	Nil	1	3	1890	Nil	Nil	Nil	Nil	1	3	1890	Nil	Deleted in Dec 91		
12.	Shivpuri	Nil	2	4	10888	Nil	Nil	Nil	Nil	2	4	10888	Nil	Deleted in Dec 91		
13.	Mandsaur	Nil	1	1	198	Nil	Nil	Nil	Nil	1	1	198	Nil	Deleted in Dec 91		
	TOTAL	333	51	485	659152	Nil	8	3395	27	17	201	154035	120	34	292	508512

* GW cases in new/re-infected villages only.

Of the 13 affected districts in 1991, 4 districts viz. Mandsaur, Sagar, Sehore and Shivpuri were deleted after a 3 years GW free surveillance. Of the 120 cases detected, 112 (93%) cases were reported from Dhar, Rajgarh and Dewas districts. Similarly of the 292 affected villages in the state 237 (81%) were in Rajgarh, Dhar and Jhabua. As compared to the situation on 1.1.91 there has been a 40% reduction in the number of GW affected villages on 1.1.92. The decline in GW cases in 1991 as compared to 1990 has been to the extent of 64%.

1.2. ACTIVE CASE VILLAGES DURING 1991 & THEIR EPIDEMIOLOGICAL INVESTIGATION.

S.No	NAME OF THE AFFECTED DISTRICTS	ACTIVE CASE VILLAGES OLD	NEW	RE-INF	TOTAL	NUMBER OF ACTIVE CASE VILLAGES INVESTIGATED* OLD	NEW	RE-INF	TOTAL
1.	Dhar	6	1	2	9	6	1	2	9
2.	Rajgarh	7	2	2	11	7	2	2	11
3.	Dewas	2	1	Nil	3	2	1	Nil	3
4.	Ujjain	2	Nil	Nil	2	1	Nil	Nil	1
5.	Shajapur	1	Nil	Nil	1	Nil	Nil	Nil	Nil
	TOTAL	18	4	4	26	16	4	4	24

* as per the Epidemiological Investigation format sent by NICD.

Though it was primary responsibility of Dist/PHC level officers, all these 24 active GW case villages were investigated by the Epidemiological Surveillance Teams of NICD, to identify factors responsible for transmission for taking corrective measures.

1.3. DISTRIBUTION OF AFFECTED VILLAGES AS ON 1.1.92

S.No	NAME OF THE AFFECTED DISTRICTS	VILLAGES UNDER SURVEILLANCE			
		1st Yr	2nd Yr	3rd Yr	TOTAL
1.	Dhar	9	9	47	65
2.	Rajgarh	11	32	107	150
3.	Dewas	3	1	7	11
4.	Ujjain	2	1	3	6
5.	Shajapur	1	4	13	18
6.	Jhabua	Nil	3	19	22
7.	Guna	Nil	2	16	18
8.	Barwani	Nil	Nil	1	1
9.	Vidisha	Nil	1	Nil	1
	TOTAL	26 (9%)	53 (18%)	213 (73%)	292

1.4. DRINKING WATER SUPPLY POSITION IN GW AFFECTED VILLAGES AS ON 1.1.92.

S.No	NAME OF THE AFFECTED DISTRICTS	SAFE DRINKING WATER SRCS.				UNSAFE DRINKING WATER SOURCES					VILLAGES WITHOUT A SINGLE SAFE SOURCE	VILLAGES REQUIRING ADDITIONAL WATER SOURCES
		HAND PUMPS	DRAW WELLS	PIPED WATER	TOTAL	STEP WELLS	PONDS	TANKS	OTHERS	TOTAL		
1.	Dhar	283	141	Nil	424	--- Information not provided ---					Nil	
2.	Rajgarh	467	520	14	1001	217	Nil	Nil	Nil	217	Nil	
3.	Dewas	45	22	2	69	2	Nil	Nil	Nil	2	Nil	COMPLETE
4.	Ujjain	21	15	Nil	26	6	Nil	Nil	Nil	6	Nil	INFORMATION
5.	Shajapur	75	124	4	203	88	Nil	Nil	Nil	88	Nil	NOT
6.	Jhabua	201	219	Nil	420	Nil	245	7	6	258	Nil	PROVIDED
7.	Guna	47	Nil	Nil	47	26	Nil	Nil	Nil	26	Nil	
8.	Barwani	information not provided				Nil	Nil	Nil	Nil	Nil	Nil	
9.	Vidisha	3	3	Nil	6	1	Nil	Nil	Nil	1	Nil	
	TOTAL	1142	1044	20	2206	340	245	7	6	598	Nil	

As per the revised norms of one hand pump/PWS for every 150 population, a total of 3390 safe drinking water sources are required in GW affected villages as on 1.1.92. However only 2206 (65%) safe water sources are existing. **The state needs to identify those GW affected villages and hamlets that require additional safe drinking water sources.**

GWEP - IMPLEMENTATION DURING 1991

2.1 GW CASE DETECTION & SURVEILLANCE

(a) COVERAGE DURING ACTIVE GUINEAWORM CASE SEARCHES

UNITS	TOTAL IN STATE	SEARCHED IN APRIL	SEARCHED IN JUNE	SEARCHED IN DECEMBER
DISTRICTS	45	13	13	13
PHCs	1,181	113	113	113
VILLAGES	76,603	19370	19370	19370
POPULATION	5,21,75,000	1,23,22,859	1,23,22,859	1,23,22,859

Inspite of guidelines & recommendations of 13th Task Force on GWEP, of the 45 districts, search was

carried out only in the 13 districts. It is to be noted that the active GW case search should be conducted in all the districts of the state. Only 1%-3% of the total villages in the state were cross checked for search quality, against the minimum requisite no. of 25% villages.

(b) NUMBER OF VILLAGES CROSS CHECKED DURING SEARCH

NO. OF VILLAGES CROSS CHECKED FOR SEARCH QUALITY		
APRIL	JUNE	DECEMBER
1,927 (2.5%)	967 (1.3%)	753 (1%)

(c) MONTHLY REPORTING OF GW CASES.

DISTRICTS	NO. OF GUINEAWORM CASES DETECTED											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Dhar	Nil	Nil	Nil	9	8	33	10	7	6	1	2	Nil
Rajgarh	Nil	1	1	2	1	9	8	Nil	1	Nil	1	Nil
Dewas	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	12
Ujjain	Nil	Nil	Nil	2	Nil	4	Nil	Nil	Nil	Nil	Nil	Nil
Shajapur	Nil	Nil	Nil	Nil	Nil	1	1	Nil	Nil	Nil	Nil	Nil
TOTAL	Nil	1	1	13	9	47	19	7	7	1	3	12

(d) MONTHLY REPORTING OF GW CASES BY DISTRICTS TO NICD.

TOTAL DISTT. IN STATE	TOTAL	NO. OF DISTTS. SUBMITTED MONTHLY REPORT IN 1991											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Endemic Districts	13	5	5	6	6	4	6	4	5	4	5	3	4
Non-Endemic Districts	32	2	1	3	4	3	2	3	3	2	3	2	1
TOTAL	45	7	6	9	10	7	8	7	8	6	8	5	5

The monthly GW case reporting has been very poorly implemented in Madhya Pradesh as is evident from the above table. Only 5 of the endemic districts sent the monthly report and that too not regularly, while very few non - endemic district sent monthly reports. At this juncture of programme implementation, early detection and containment is of the utmost necessity, hence monthly surveillance and reporting needs to be strictly followed by all the districts, even if report is nil.

2.2 GW CASE MANAGEMENT

Patients were reported to have been managed by providing bandages and taking care of the complications, mostly by ESTs.

2.3 TEMEPHOS TREATMENT OF UNSAFE DRINKING WATER SOURCES.

S.No	NAME OF THE AFFECTED DISTRICTS	NUMBER OF UNSAFE WATER SOURCES RECORDED	NUMBER OF UNSAFE WATER SOURCES TREATED WITH TEMEPHOS*				NO. OF VILLAGES MONITORED FOR TEMEPHOS APPLICATION	AMOUNT OF TEMEPHOS	
			NEVER	1-2 TIMES	3-4 TIMES	5-6 TIMES	SEVEN-EIGHT T I M E S		CONSUMED DURING THE YEAR	BALANCE AT THE END OF YEAR
1.	Dhar	202	65	28	60	49	Nil	38	53 Ltrs.	64 Ltrs.
2.	Rajgarh	103	Nil	2	11	12	78	18	205 Ltrs.	470 Ltrs.
3.	Dewas	25	Nil	Nil	Nil	Nil	25	9	27 Ltrs.	30 Ltrs.
4.	Ujjain	5	Nil	Nil	Nil	5	Nil	Nil	5 Ltrs.	Nil
5.	Shajapur	70	Nil	Nil	Nil	Nil	70	30	20 Ltrs.	120 Ltrs.
6.	Jhabua	842	269	387	186	Nil	Nil	11	30 Ltrs.	Nil
7.	Guna	63	Nil	Nil	Nil	Nil	63	29	25 Ltrs.	115 Ltrs.
8.	Barwani	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
9.	Vidisha	1	Nil	Nil	Nil	1	Nil	1	3 Ltrs.	20 Ltrs.
10.	Sagar	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
11.	Sehore	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
12.	Shivpuri	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
13.	Mandsaur	15	Nil	Nil	Nil	Nil	15	1	5 Ltrs.	15 Ltrs.
	TOTAL	1326	334	417	257	67	251	137	373 Ltrs.	834 Ltrs.

Inspite of the availability of enough quantity of temephos, of the 1326 identified unsafe drinking water sources, 334 (25%) were never treated, and only 318 (24%) were adequately treated. Such poor performance of Temephos application is not in the interest of GWEP, and needs to be improved during 1992 on priority. The unsafe drinking water sources in all the GW affected villages should continue to be treated with temephos.

2.4 STRAINERS DISTRIBUTED.

NUMBER COVERED FOR DISTRIBUTION IN STATE				NO. OF STRAINERS	
DISTRICTS	PHCs	VILLAGES	HOUSEHOLDS	DISTRIBUTED	BALANCE
Dhar	5	65	2676	1176	1500
Rajgarh	6	249	9540	6300	3240
Guna	1	3	200	200	Nil
Vidisha	1	1	360	180	180
TOTAL	13	318	12776	7856	4920

2.5 HEALTH EDUCATION

(a) QUANTITY OF HEALTH EDUCATION MATERIAL UTILISED.

S.No.	NAME OF THE AFFECTED DISTRICTS	HEALTH EDUCATION MATERIAL								
		Flash Cards	Flip Chart	Pos-ters	G.W. Hand Book	Filter Cloth	Pamph-lets	G.W. Questio-nary	Slide	Book of Sanitation & Anganwadi
1.	Dhar	408	780	1126	308	1242	12848	350	Nil	148
2.	Rajgarh	165	940	750	Nil	2100	Nil	1250	11	44
3.	Dewas	210	700	390	240	Nil	150	80	11	30
4.	Ujjain	40	50	150	45	45	Nil	25	Nil	208
5.	Shajapur	Nil	Nil	2500	Nil	Nil	5000	250	50	Nil
6.	Jhabua	165	41	95	3600	175	90	120	Nil	Nil
7.	Guna	165	690	300	1	210	210	21	9	23
	T O T A L	1153	3201	5311	4194	3772	18298	2096	81	453

(b) HEALTH EDUCATION ACTIVITIES UNDERTAKEN.

S.No.	NAME OF THE AFFECTED DISTRICTS	NO. OF HEALTH EDUCATION ACTIVITIES UNDERTAKEN								
		Group Meeting	Slogan	Film Show	Slide Show	Prabhat Pheri	VHC	VCT	VCD	Nukad Natak
1.	Dhar	61	383	7	9	52	378	137	35	Nil
2.	Rajgarh	242	586	25	25	235	1035	494	7	282
3.	Dewas	13	103	8	7	12	12	12	12	12
4.	Ujjain	2	900	4	4	18	2	2	2	18
5.	Shajapur	127	840	Nil	12	56	Nil	6	Nil	56
6.	Jhabua	114	252	11	Nil	10	31	19	7	3
7.	Guna	21	Nil	Nil	Nil	21	21	27	Nil	Nil
	TOTAL	580	3064	55	57	404	1479	697	63	371

Considering the importance of GW health education, the state should immediately strengthen the guineaworm health education programmes in all the districts, which has been poorly implemented hitherto. Likewise, the GW-Education day must be celebrated in the whole state as per prescribed guidelines.

(c) GUINEAWORM EDUCATION DAY CELEBRATION (APRIL '91)

Level of celebrations	number celebrated
Districts	3
PHCs	17
Sub-centres	199
Villages	78

2.6. TRAINED MANPOWER DEVELOPMENT UNDER GWEP

The state has not presented the information in the required format. In absence of which it is not possible to estimate the percentage of vacancies and the GWEP training states of Distt/PHC functionaries. However, it is reported that 236 PHE staff 166 Health staff, 118 Mechanics and 11 HP users were trained during 1991 in One day Orientation Courses. No information on number of persons remaining untrained has been given.

Since Director of Medical Health & Health Services and GWEP-officer of Madhya Pradesh did not attend this Task Force Meeting, the above compilation is based on the report received through a messenger.

REPORT OF MAHARASHTRA

1.CURRENT GUINEAWORM DISEASE SITUATION

1.1 GUINEAWORM SITUATION AS ON 1.1.1992.

S.No	NAME OF THE AFFECTED DISTRICTS	GW CASES 1990	AS ON 1.1.1991 PHCs	VILLAGES	POPULATION	NEWLY AFFECTED IN 1991 PHCs	VILLAGES	POPULATION	CASES	DELETED IN 1991 PHCs	VILLAGES	POPULATION	GW CASES 1991	AS ON 1.1.92 PHCs	VILLAGES	POPULATION
1.	Raigad	34	20	93	32539	Nil	Nil	Nil	Nil	7	61	20212	Nil	13	32	12327
2.	Thane	144	24	56	99113	Nil	Nil	Nil	Nil	8	27	13988	Nil	16	29	85125
3.	Ratnagiri	Nil	5	18	4857	Nil	Nil	Nil	Nil	4	14	3810	Nil	1	4	1047
4.	Nanded	7	8	10	15828	Nil	Nil	Nil	Nil	6	8	12956	Nil	2	2	2872
5.	Latur	20	5	6	20244	Nil	Nil	Nil	Nil	3	4	2231	Nil	2	2	18013
6.	Parbhani	Nil	2	4	3624	Nil	Nil	Nil	Nil	1	2	1358	Nil	1	2	2266
7.	Beed	Nil	1	1	800	Nil	Nil	Nil	Nil	1	1	800	Nil	Deleted in Dec 91		
8.	Osmanabad	Nil	1	1	2143	Nil	Nil	Nil	Nil	1	1	2143	Nil	Deleted in Dec 91		
9.	Buldhana	3	1	1	1127	Nil	Nil	Nil	Nil	1	1	1127	Nil	Deleted in Dec 91		
	TOTAL	209	67	190	180275	Nil	Nil	Nil	Nil	32	119	58625	Nil	35	71	121650

During 1991, the state of Maharashtra did not record a single guineaworm case.

During the year 1991, three districts (Beed, Osmanabad and Buldhana), 32 PHCs and 119 villages were deleted after being free from GW disease for the three consecutive years. However, district Buldhana was deleted following a surveillance of one year since only imported cases were detected in 1990.

1.2 DISTRIBUTION OF AFFECTED VILLAGES AS ON 1.1.92

S.No	NAME OF THE AFFECTED DISTRICTS	VILLAGES UNDER SURVEILLANCE 1st Yr	2nd Yr	3rd Yr	TOTAL
1.	Raigad	Nil	14	18	32
2.	Thane	Nil	10	19	29
3.	Ratnagiri	Nil	Nil	4	4
4.	Nanded	Nil	1	1	2
5.	Latur	Nil	2	Nil	2
6.	Parbhani	Nil	Nil	2	2
	TOTAL	Nil	27(38%)	44(62%)	71

1.3 DRINKING WATER SUPPLY POSITION IN GW AFFECTED VILLAGES AS ON 1.1.92

As per the present norm of one safe drinking water source per 150 population, 755 safe drinking water sources are available as against the requirement of 811. However 6 GW affected villages are still without a single safe drinking water source in Thane and Raigad districts.

S.No	NAME OF THE AFFECTED DISTRICTS	SAFE DRINKING WATER SRC HAND PUMPS	DRAW WELLS	PIPED WATER	TOTAL	UNSAFE DRINKING WATER SOURCES STEP WELLS	PONDS	TANKS	OTHERS	TOTAL	VILLAGES WITHOUT A SINGLE SAFE SOURCE	VILLAGES REQUIRING ADDITIONAL WATER SOURCES
1.	Raigad	36	181	22	239	2	603	Nil	16	621	4	Nil
2.	Thane	72	238	9	319	Nil	434	Nil	Nil	434	2	Nil
3.	Ratnagiri	5	34	1	40	10	40	Nil	1	51	Nil	Nil
4.	Nanded	23	46	6	75	95	2	Nil	2	99	Nil	Nil
5.	Latur	8	37	5	50	1	3	Nil	1	5	Nil	Nil
6.	Parbhani	9	22	1	32	8	Nil	Nil	Nil	8	Nil	Nil
	TOTAL	153	558	44	755	116	1082	Nil	20	1218	6	Nil

2. GWEP - IMPLEMENTATION DURING 1991

2.1 GW CASE DETECTION & SURVEILLANCE

(a) COVERAGE DURING ACTIVE GUINEAWORM CASE SEARCHES

Active case search operations have been carried out in all the districts of the state. However, some villages were left in the April and June searches.

UNITS	TOTAL IN STATE	SEARCHED IN APRIL	SEARCHED IN JUNE	SEARCHED IN DECEMBER
DISTRICTS	29	29	29	29
PHCs	1671	1650	1631	1671
VILLAGES	39683	38861	38650	39683
POPULATION	7,87,48,215	5,17,71,348	5,70,76,805	6,84,74,792

Between 40% to 50% of the total villages in the state were cross checked for search quality.

(b) NUMBER OF VILLAGES CROSS CHECKED DURING SEARCH

NO. OF VILLAGES CROSS CHECKED FOR SEARCH QUALITY		
APRIL	JUNE	DECEMBER
16,060 (40.5%)	17,574 (44.3%)	19,750 (50%)

(c) MONTHLY INCIDENCE OF GW CASES AND REPORTING.

TOTAL DISTT. IN STATE	TOTAL	NO. OF DISTTS. SUBMITTED MONTHLY REPORT IN 1991											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Endemic Districts	9	9	9	9	9	7	7	9	8	7	6	5	6
Non-Endemic Districts	20	19	15	21	17	14	13	14	13	14	14	16	10
TOTAL	29	28	24	30	26	21	20	23	21	21	20	21	16

Majority of the endemic districts regularly sent the monthly reports to NICD. However few of the non-endemic districts did not send monthly surveillance reports on a regular basis.

The state has reported to be carrying out weekly surveillance in guineaworm affected villages for which the headquarters of male multipurpose workers (MPW) have been temporarily shifted to the affected villages.

2.2 TEMEPHOS TREATMENT OF UNSAFE DRINKING WATER SOURCES.

S.No	NAME OF THE AFFECTED DISTRICTS	NUMBER OF UNSAFE WATER SOURCES RECORDED	NUMBER OF UNSAFE WATER SOURCES TREATED WITH TEMEPHOS					NO. OF VILLAGES MONITORED FOR TEMEPHOS APPLICATION	AMOUNT OF TEMEPHOS (Lts)	
			NEVER	1-2 TIMES	3-4 TIMES	5-6 TIMES	SEVEN TIMES	EIGHT TIMES	CONSUMED DURING THE YEAR	BALANCE AT THE END OF YEAR
1.	Raigad	770	8	319	82	147	26	188	54	447.779	11.271
2.	Thane	714	Nil	Nil	Nil	Nil	80	634	21	640.000	30.000
3.	Ratnagiri	51	1	Nil	Nil	9	19	22	43	63.580	Nil
4.	Nanded	95	1	Nil	Nil	Nil	Nil	94	9	84.958	Nil
5.	Latur	77	Nil	Nil	Nil	Nil	Nil	77	6	170.000	Nil
6.	Parbhani	57	Nil	17	16	14	Nil	10	18	79.053	Nil
7.	Beed	3	Nil	Nil	Nil	Nil	Nil	3	1	1.393	0.260
8.	Osmanabad	3	Nil	Nil	Nil	Nil	Nil	3	1	42.000	8.000
9.	Buldhana	3	Nil	Nil	Nil	3	Nil	Nil	Nil	15.000	Nil
10.	Aurangabad	7	Nil	Nil	Nil	7	Nil	Nil	1	0.250	Nil
	TOTAL	1780	10	336	98	180	125	1031	154	1544.013	49.531

During 1991, 99% of unsafe water sources in guineaworm affected villages were treated with temephos. Majority (65%) unsafe drinking water sources were treated more than 6 times in the year. Incomplete temephos application in the remaining unsafe water sources was attributed to temporary water sources drying up with the onset of summer.

2.3 STRAINERS DISTRIBUTED .

S.NO	NUMBER COVERED FOR DISTRIBUTION IN STATE			NO. OF STRAINERS	
	DISTRICTS	PHCs	VILLAGES	HOUSEHOLDS	DISTRIBUTED	BALANCE
1.	Raigad	6	8	470	470	Nil
2.	Thane	28	96	604	604	Nil
3.	Ratnagiri	Nil	Nil	Nil	Nil	Nil
4.	Nanded	2	2	571	500	Nil
5.	Latur	5	6	2892	25	Nil
6.	Satara	65	120	721	721	Nil
	TOTAL	106	232	5258	2320	Nil

Strainers prepared by the state were distributed in adequate numbers, to the house holds of affected villages.

2.4 HEALTH EDUCATION
(a) QUANTITY OF HEALTH EDUCATION MATERIAL UTILISED.

S.No.	NAME OF THE AFFECTED DISTRICT	HEALTH EDUCATION MATERIAL					
		Posters	Pamphelets	Tin Plates	Slogans	Stickers	Calenders
1.	Raigad	243	2054	4	508	3000	1360
2.	Thane	2005	3670	746	5212	4000	1650
3.	Ratnagiri	210	3514	Nil	2410	2000	2225
4.	Nanded	Nil	20000	Nil	6558	1500	136
5.	Latur	500	5000	Nil	20	2000	600
6.	Parbhani	80	96	4	25	2000	1300
7.	Beed	52	7	Nil	60	1200	1200
8.	Osmanabad	250	2000	Nil	360	2500	600
9.	Buldhana	100	250	Nil	150	1000	1000
10.	Aurangabad	100	250	Nil	250	900	500
	TOTAL	3540	36841	754	15553	20100	10571

COMMUNITY HEALTH CELL
LIBRARY AND INFORMATION CENTRE
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(b) HEALTH EDUCATION ACTIVITIES UNDERTAKEN.

S.No.	NAME OF THE AFFECTED DISTRICT	NO. OF HEALTH EDUCATION ACTIVITIES UNDERTAKEN				
		Group Meeting	Film Shows	Video Cassette & Slide Shows	O.T.C. for Villagers	O.T.C. for Teachers/ Sarpanch
1.	Raigad	1415	Nil	Nil	Nil	Nil
2.	Thane	1499	215	Nil	13	Nil
3.	Ratnagiri	1700	5	3	Nil	7
4.	Nanded	6318	Nil	Nil	Nil	Nil
5.	Latur	282	5	Nil	6	Nil
6.	Parbhani	467	1	Nil	Nil	Nil
7.	Beed	130	4	Nil	Nil	Nil
8.	Osmanabad	48	27	15	2	Nil
9.	Buldhana	1932	Nil	Nil	Nil	1
10.	Aurangabad	1820	Nil	Nil	Nil	Nil
	TOTAL	15611	257	18	21	8

(c) GUINEAWORM EDUCATION DAY CELEBRATION (APRIL '91)

Level of celebrations	number celebrated
Districts	29
PHCs	571
Sub-centres	1919
Villages	5513

GED was celebrated at district level in all the 29 districts in the state.

2.5 TRAINED MANPOWER DEVELOPMENT UNDER GWEP.

S.No	NAME OF THE AFFECTED DISTRICTS	DH		MO		HA		MP		NO. TRAINED DURING 1991				NO. OF PERSONS REAMAINING UNTRAINED				
		SANCT	POS	SANCT	POS	SANCT	POS	SANCT	POS	MOs	HEOs	HAs	MPWs	DHOs	MOs	HEOs	HAs	MPWs
1.	Raigad	3	3	89	57	161	124	441	365	55	Nil	124	365	1	2	Nil	Nil	Nil
2.	Thane	4	4	122	94	268	242	673	591	90	1	242	591	2	4	Nil	Nil	Nil
3.	Ratnagiri	3	3	116	89	150	97	770	639	78	1	92	611	2	11	Nil	5	28
4.	Nanded	3	3	116	111	107	81	143	42	85	1	65	130	2	26	Nil	16	12
5.	Latur	3	3	78	71	68	65	116	110	71	1	65	110	2	Nil	Nil	Nil	Nil
6.	Parbhani	4	4	99	69	89	72	340	225	69	Nil	72	225	1	Nil	Nil	Nil	Nil
7.	Beed	3	3	84	77	74	65	228	158	58	1	48	130	3	19	Nil	17	28
8.	Osmanabad	3	3	80	74	96	86	212	192	73	Nil	86	192	1	Nil	1	Nil	Nil
9.	Buldhana	3	2	78	63	205	192	285	263	63	Nil	192	263	1	Nil	Nil	Nil	Nil
10.	Aurangabad	4	4	68	63	91	91	500	480	63	1	91	480	Nil	Nil	Nil	Nil	Nil
	TOTAL	33	32	930	768	1309	1115	3708	3065	705	6	1077	3097	15	62	1	38	68

Abbreviation : HEO - Health Education/Media Officer, HA - Health Assistants/supervisors/inspectors
PHE - Public Health Engineers, DHO - District level Health Officer, MO - Medical Officer
SANCT - SANCTIONED, POS - IN POSITION

Efforts should be made by the state to (1)fill the vacant posts of medical officers of PHC (18%), HA (15%) and MPW (17%) and (2)continuously train the remaining untrained DHOs, PHC medical officers, HAs. MPWs and PHEs as per the teaching modules already provided by NICD.

2.7 FUNCTIONING OF VOLUNTARY ORGANISATION IN GWEP

'Impact India' a voluntary organisation is actively involved in guineaworm case detection and assisting in temephos application in Bhiwandi Municipal area since October '90. Similarly another two voluntary organisations viz. Samidha Charitable in Thane and Ogya Dakshta Mandal in Pune are functioning for GWEP activities.

ACTION PLAN FOR 1992

Activity	Frequency	Person Responsible
1. Active surveillance in the affected villages and PHCs	1) Weekly surveillance in the affected villages - continuous activity	MPWs
	2) Monthly surveillance in all the villages on the affected PHCs - continuous activity	MPWs
2. Active case surveys throughout the State	April, June & Dec.	MPWs, MOs, DHOs
3. Surveillance at the labour sites.	Fortnightly	- do -
4. Visits of District level Officers to affected PHC and villages adopted by them	Monthly	Addl. DHO, ADHO, DIO & DTO.
5. Surveillance in the bordering blocks/villages	Fortnightly	MPW/HA
6. Visits to schools and weekly bazar for surveillance and health education	Monthly	MPW/HA, MO, DHO during their visits
7. Border District Meetings		
1) Inter State	Quarterly	State Programme Officer
2) State	Quarterly	
8. Co-ordination meeting at District level	Monthly	DHO
9. Co-ordination meeting at State level	Quarterly	State Programme Officer
10. Temephos application	Monthly	MPW/HA
11. **Health Education**		
i) Mass Slogans Writing	April & May	District Programme Officer
ii) Awareness Camps in the affected villages		
iii) Wide publicity through electronic media		
iv) Guineaworm Education day celebration		
v) Publicity to incentive scheme.		

REPORT OF RAJASTHAN

1. CURRENT GUINEAWORM DISEASE SITUATION

1.1 GUINEAWORM SITUATION AS ON 1.1.1992.

S.No	NAME OF THE AFFECTED DISTRICTS	GW CASES 1990	AS ON 1.1 1991 PHCs	VILLAGES	POPULATION	NEWLY AFFECTED IN 1991 PHCs	VILLAGES	POPULATION	CASES *	DELETED IN 1991 PHCs	VILLAGES	POPULATION	GW CASES 1991	AS ON 1.1.1992 PHCs	VILLAGES	POPULATION
1.	Udaipur	1169	12	627	439795	2	21	28909	43	1	193	101907	489	13	455	366797
2.	Dungarpur	439	5	276	145960	Nil	45	31971	108	Nil	46	38129	385	5	275	139803
3.	Nagaur	369	7	56	95543	Nil	16	33546	57	2	9	28947	294	5	63	100142
4.	Jhalawar	773	5	290	115217	Nil	21	10901	53	Nil	23	24222	227	5	288	101896
5.	Jodhpur	279	7	46	106915	1	7	31872	51	1	23	67157	153	7	30	71630
6.	Banswara	38	7	131	74955	Nil	28	30500	42	Nil	41	30172	89	7	118	75283
7.	Barmer	202	8	91	165282	Nil	4	1723	4	2	39	72417	31	6	56	94588
8.	Kota	42	7	18	10256	2	5	8569	5	1	11	7332	21	8	12	11493
9.	Bikaner	12	1	6	14458	Nil	1	3332	1	Nil	1	236	18	1	6	17554
10.	Jalore	4	3	5	7313	1	2	5628	3	2	5	7313	4	2	2	5628
11.	Jaiselmer	27	2	6	14887	Nil	1	336	1	Nil	5	11399	1	2	2	3824
12.	Tonk	16	1	1	206	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1	1	206
13.	Chittorgarh	4	3	6	9859	Nil	Nil	Nil	Nil	1	4	8154	Nil	2	2	1705
14.	S. Madhopur	Nil	1	1	239	Nil	Nil	Nil	Nil	1	1	239	Nil	Deleted in Dec 91		
15.	Sirohi	Nil	1	5	11715	Nil	Nil	Nil	Nil	1	5	11715	Nil	Deleted in Dec 91		
	TOTAL	3376	70	1565	1212600	6	151	187287	368	12	406	409339	1712	64	1310	990548

* GW cases in new/re-infected villages only.

1712 guineaworm cases were reported from 11 GW affected districts 1637 (95%) cases were recorded in six districts, viz. Udaipur (29%), Dungarpur (22%), Nagaur (17%), Jhalawar (13%), Jodhpur (9%) and Banswara (5%).

Annual decline of 49% in guineaworm cases was observed during 1991, the highest decline being in Jaiselmer (96%) and Barmer (85%) followed by Jhalawar (71%), Udaipur (58%), Kota (50%), Jodhpur (45%), Nagaur (20%) & Dungarpur (12%). Banswara and Bikaner districts however recorded an increase in guineaworm cases compared to previous year.

There were 151 villages as newly/reinfected, which contributed 368 (21%) of the total guineaworm cases in the state during 1991.

Of the 484 villages which reported active guineaworm cases in Rajasthan during 1991, 29% were in Dungarpur, 19% in Banswara and 14% each in Udaipur and Jhalawar. Two districts (Sirohi and Sawai Madhopur), 12 PHCs and 406 villages were deleted on 31.12 91. Only 372 villages with active GW cases were epidemiologically investigated for GW transmission and corrective measures, which is considered unsatisfactory (Table 1.2).

1.2 ACTIVE CASE VILLAGES DURING 1991 & THEIR EPIDEMIOLOGICAL INVESTIGATION.

S.No	NAME OF THE AFFECTED DISTRICTS	ACTIVE CASE VILLAGES				NUMBER OF ACTIVE CASE VILLAGES INVESTIGATED			
		OLD	NEW	RE-INF	TOTAL	OLD	NEW	RE-INF	TOTAL
1.	Udaipur	124	9	12	145	86	4	3	93
2.	Dungarpur	63	Nil	45	108	40	Nil	40	80
3.	Nagaur	24	11	5	40	25	10	5	40
4.	Jhalawar	65	15	6	86	41	15	6	62
5.	Jodhpur	8	3	4	15	8	3	4	15
6.	Banswara	29	5	23	57	25	5	22	52
7.	Barmer	13	4	Nil	17	13	1	Nil	14
8.	Kota	2	4	1	7	2	4	1	7
9.	Bikaner	5	1	Nil	6	5	1	Nil	6
10.	Jalore	Nil	1	1	2	Nil	1	1	2
11.	Jaiselmer	Nil	1	Nil	1	Nil	1	Nil	1
	TOTAL	333	54	97	484	245	45	82	372

1.3 DISTRIBUTION OF AFFECTED VILLAGES AS ON 1.1.92

S.NO	NAME OF THE AFFECTED DISTRICTS	VILLAGES UNDER SURVEILLANCE			
		1st Yr	2nd Yr	3rd Yr	TOTAL
1.	Udaipur	145	149	161	455
2.	Dungarpur	108	75	92	275
3.	Nagaur	40	13	10	63
4.	Jhalawar	86	112	90	288
5.	Jodhpur	15	5	10	30
6.	Banswara	57	19	42	118
7.	Barmer	17	21	18	56
8.	Kota	7	5	Nil	12
9.	Bikaner	6	Nil	Nil	6
10.	Jalore	2	Nil	Nil	2
11.	Jaiselmer	1	Nil	1	2
12.	Tonk	Nil	1	Nil	1
13.	Chittorgarh	Nil	1	1	2
	TOTAL	484	401	425	1310

1.4 DRINKING WATER SUPPLY POSITION IN GW AFFECTED VILLAGES AS ON 1.1.92.

S.No	NAME OF THE AFFECTED DISTRICTS	SAFE DRINKING WATER SOURCES					UNSAFE DRINKING WATER SOURCES					VILLAGES WITHOUT A SINGLE SAFE SOURCE	VILLAGES REQUIRING ADDITIONAL WATER SOURCES
		HAND PUMPS	DRAW WELLS	PIPED WATER	OTHER	TOTAL	STEP WELLS	PONDS	TANKS	OTHERS	TOTAL		
1.	Udaipur	2459	2679	38	Nil	5176	1910	39	44	Nil	1993	18	518
2.	Dungarpur	2268	1774	30	Nil	4072	985	15	Nil	Nil	1000	Nil	Nil
3.	Nagaur	101	54	79	Nil	234	Nil	122	Nil	Nil	122	Nil	Nil
4.	Jhalawar	869	859	10	Nil	1738	458	Nil	Nil	2	460	21	73
5.	Jodhpur	23	35	24	19	101	Nil	49	Nil	Nil	49	Nil	Nil
6.	Banswara	740	850	12	Nil	1602	282	Nil	9	Nil	291	Nil	Nil
7.	Barmer	47	308	74	Nil	429	Nil	140	18	25	183	Nil	Nil
8.	Kota	92	74	Nil	Nil	166	22	Nil	Nil	Nil	22	Nil	6
9.	Bikaner	Nil	10	6	Nil	16	Nil	26	Nil	Nil	26	Nil	12
10.	Jalore	1	14	2	Nil	17	Nil	4	Nil	Nil	4	Nil	Nil
11.	Jaiselmer	1	2	2	Nil	5	Nil	Nil	2	Nil	2	Nil	Nil
12.	Tonk	4	2	Nil	Nil	6	8	Nil	Nil	Nil	8	Nil	Nil
13.	Chittorgarh	9	10	Nil	Nil	19	3	Nil	1	Nil	4	Nil	Nil
	TOTAL	6614	6671	277	19	13581	3668	395	74	27	4164	39	609

39 GW affected villages in highly GW endemic districts are without a single safe drinking water source and 609 affected villages require augmentation of water supplies. Apart from these main villages many hamlets are without single safe drinking water source through the main village may have enough sources. These villages need to be provided safe drinking water sources, on top priority in order to break GW transmission during 1992.

2. GWEP - IMPLEMENTATION DURING 1991

2.1 GW CASE DETECTION & SURVEILLANCE

(a) COVERAGE DURING ACTIVE GUINEAWORM CASE SEARCHES

UNITS	TOTAL IN STATE	SEARCHED IN APRIL	SEARCHED IN JUNE	SEARCHED IN DECEMBER
DISTRICTS	27	15	15	15
PHCs	236	125	125	125
VILLAGES	33305	18532	18532	18532
POPULATION	3,42,61,867	2,13,34,031	2,13,34,031	2,13,34,031

Inspite of guidelines to cover all the districts in the state, active case search was carried out only in the 15 endemic districts. The concurrent monitoring by ESTs indicated that the active GW case search operations in the state were not satisfactory in terms of coverage and quality in many areas, specially in Udaipur where 25 missed foci and 49 missed cases were detected. This needs to be improved on priority during 1992 for active GW surveillance in order to detect all GW cases to take prompt corrective measures.

(b) NUMBER OF VILLAGES CROSS CHECKED DURING SEARCH

NO. OF VILLAGES CROSS CHECKED FOR SEARCH QUALITY		
APRIL	JUNE	DECEMBER
3,901 (11.7%)	4,531 (13.6%)	4,103 (12.3%)

The state should improve the quality of active GW case search operation and its cross-check as well as evaluation by the PHC & Distt. functionaries.

(c) MONTHLY SURVEILLANCE & REPORTING OF GW CASES BY DISTRICTS.

DISTRICTS	NO. OF GUINEAWORM CASES DETECTED											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Udaipur	2	Nil	1	224	19	138	11	24	47	2	6	15
Dungarpur	Nil	Nil	Nil	186	Nil	100	22	4	17	20	6	30
Nagaur	Nil	Nil	Nil	1	4	52	30	76	44	6	60	21
Jhalawar	Nil	Nil	1	101	1	69	6	7	17	12	10	3
Jodhpur	Nil	Nil	Nil	4	Nil	Nil	46	85	9	9	Nil	Nil
Banswara	Nil	Nil	3	50	6	10	3	Nil	3	5	1	8
Barmer	2	Nil	1	Nil	Nil	27	Nil	Nil	Nil	Nil	Nil	1
Kota	Nil	Nil	1	3	Nil	14	1	1	Nil	Nil	Nil	1
Bikaner	Nil	Nil	Nil	Nil	Nil	17	Nil	Nil	Nil	Nil	Nil	1
Jalore	Nil	Nil	Nil	1	Nil	Nil	Nil	Nil	2	1	Nil	Nil
Jaiselmer	Nil	Nil	Nil	Nil	Nil	1	Nil	Nil	Nil	Nil	Nil	Nil
T O T A L	4	Nil	7	570	30	428	119	197	139	55	83	80

(d) MONTHLY REPORTING OF GW CASES BY DISTRICTS TO NICD.

TOTAL DISTT. IN STATE	TOTAL	NO. OF DISTTS. SUBMITTED MONTHLY REPORT IN 1991											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Endemic Districts	15	8	8	10	12	11	12	10	11	9	9	9	5
Non-Endemic Districts	7	6	5	5	3	3	4	5	3	3	4	3	2
T O T A L	22	14	13	15	15	14	16	15	14	12	13	12	7

All the districts in state, irrespective of their GW endemicity must be advised to regularly submit the monthly GW report, even if nil, to NICD, Delhi for close monitoring of GW situation for timely necessary action to interrupt GW transmission.

2.2 GW CASE MANAGEMENT

GW case management with prompt & regular bandaging by MPWs needs to be further strengthened in the state, for preventing complications among GW patients as well as interrupting GW transmission. This will also help in voluntary reporting of GW cases, thus will strngthen the GW case detection and surveillance in the state.

2.3 TEMEPHOS TREATMENT OF UNSAFE DRINKING WATER SOURCES.

S.No	NAME OF THE AFFECTED DISTRICTS	NUMBER OF UNSAFE WATER SOURCES RECORDED	NUMBER OF UNSAFE WATER SOURCES TREATED WITH TEMEPHOS					NO. OF VILLAGES MONITORED FOR TEMEPHOS APPLICATION	AMOUNT OF TEMEPHOS IN LITRES	
			NEVER	1-2 TIMES	3-4 TIMES	5-6 TIMES	SEVEN-EIGHT TIMES		CONSUMED DURING THE YEAR	BALANCE AT THE END OF YEAR
1.	Udaipur	2250	102	215	201	595	1137	124	2066.3	96.7
2.	Dungarpur	950	60	40	380	390	80	250	400	120
3.	Nagaur	122	50	65	7	Nil	Nil	38	190	Nil
4.	Jhalawar	1256	5	137	378	569	167	264	734	Nil
5.	Jodhpur	23	2	2	Nil	Nil	19	15	349	Nil
6.	Banswara	292	4	32	155	80	21	31	202	100
7.	Barmer	183	29	47	47	Nil	60	22	201	71
8.	Kota	22	Nil	8	7	Nil	7	10	100	10
9.	Bikaner	25	9	14	2	Nil	Nil	6	15	Nil
10.	Jalore	16	7	5	1	2	1	4	10	9
11.	Jaiselmer	5	5	Nil	Nil	Nil	Nil	Nil	Nil	15
12.	Tonk	8	Nil	Nil	Nil	Nil	8	1	15	5
13.	Chittorgarh	4	Nil	Nil	Nil	Nil	4	4	10	10
14.	S. Madhopur	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
15.	Bundi	4	Nil	Nil	Nil	4	Nil	1	26	Nil
	TOTAL	5160	273	565	1178	1640	1504	770	4318.3	436.7

Inspite the utmost importance and guidelines for vector Control measures to interrupt GW-transmission, 39 % of the recorded unsafe drinking water sources were inadequately treated with temephos, especially in the districts of Nagaur, Dungarpur, Banswara, Jhalawar, & Udaipur. Of the 5160 recorded unsafe sources, only 29% received 7-8 temephos applications.

It is emphasised that Temephos application to unsafe drinking water sources in all the guineaworm affected villages needs to be immediately planned for its efficient implementation. It is very vital that the State Directorate of Health & Medical services & district health authorities should very frequently monitor this activity 'on the spot' & take necessary action in case of default/lapses, in the larger interest of guineaworm eradication from the state/country.

2.4 STRAINERS DISTRIBUTED.

NUMBER COVERED FOR DISTRIBUTION IN STATE				NO. OF STRAINERS	
DISTRICTS	PHCs	VILLAGES	HOUSEHOLDS	DISTRIBUTED	BALANCE
Udaipur	12	191	16700	16700	Nil
Dungarpur	5	130	16795	16795	1800
Nagaur	3	58	6700	6700	Nil
Jhalawar	5	109	7982	7982	518
Jodhpur	7	30	10300	10300	Nil
Banswara	7	23	7250	7250	50
Barmer	8	47	2050	20050	50
Kota	5	7	2515	2515	Nil
Bikaner	1	5	1700	1700	Nil
Jalore	3	4	1100	1100	Nil
Jaiselmer	2	7	3005	3000	Nil
T O T A L	58	611	76097	94092	2418

2.5 HEALTH EDUCATION

(a) QUANTITY OF HEALTH EDUCATION MATERIAL UTILISED.

S.No.	NAME OF THE AFFECTED DISTRICTS	HEALTH EDUCATION MATERIAL							
		Posters	Pamph-lets	Flip Book	Slogan Books	Video	Projection Slides	Tin Plates	Folder
1.	Udaipur	8950	7957	100	15	1	1	20	50
2.	Dungarpur	500	500	10	428	Nil	1	Nil	10
3.	Nagaur	4710	840	40	8	1	Nil	590	40
4.	Jhalawar	28770	31434	52	43437	1	1	30	Nil
5.	Jodhpur	900	13000	35	15	1	1	10	100
6.	Banswara	3800	500	Nil	235	Nil	Nil	Nil	Nil
7.	Barmer	500	20000	Nil	180	Nil	Nil	40	Nil
8.	Kota	1950	8500	87	15	1	Nil	100	100
9.	Bikaner	3600	400	Nil	60	Nil	6	20	10
10.	Jalore	2500	200	13	50	Nil	1	10	Nil
11.	Jaiselmer	456	1400	8	40	1	1	20	10
12.	Tonk	573	150	6	400	Nil	Nil	6	10
13.	Chittorgarh	916	215	Nil	509	Nil	Nil	5	Nil
14.	S. Madhopur	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
15.	Bundi	700	1000	20	2250	Nil	Nil	4	15
	TOTAL	58825	86096	371	47642	6	12	855	345

(b) HEALTH EDUCATION ACTIVITIES UNDERTAKEN.

S.No.	NAME OF THE AFFECTED DISTRICTS	NO. OF HEALTH EDUCATION ACTIVITIES UNDERTAKEN						
		Mass Meeting	Group Meeting	Poster Display	Hand Bills	Wall Slogans	Health talks in School	Exhibitions
1.	Udaipur	635	4980	8950	7957	15	1732	3
2.	Dungarpur	9	275	500	500	428	43	Nil
3.	Nagaur	110	1174	4710	840	8	45	40
4.	Jhalawar	570	8676	28770	31434	43437	1139	Nil
5.	Jodhpur	140	1250	900	13000	15	30	87
6.	Banswara	7	90	3800	500	235	4	Nil
7.	Barmer	45	345	500	20000	180	6	Nil
8.	Kota	37	1589	2950	8500	15	25	Nil
9.	Bikaner	15	50	3600	Nil	Nil	10	Nil
10.	Jalore	24	187	2500	260	Nil	10	1
11.	Jaiselmer	15	40	456	1400	Nil	7	13
12.	Tonk	14	60	573	150	400	3	40
13.	Chittorgarh	1	1232	916	215	509	54	Nil
14.	S. Madhopur	Nil	Nil	Nil	Nil	Nil	Nil	Nil
15.	Bundi	40	100	700	1000	2250	4	Nil
	TOTAL	1662	20048	59825	85756	47492	3112	184

Considering the proven need & cost effectiveness of community education & its involvement, the guineaworm health education programme need to be further intensifies in the whole state, on priority.

Guineaworm education day was celebrated in 962 villages (districts not specified), on 25th April, to create awareness among the community. GED celebration should cover all the districts, PHCs and sub-centres in the state during 1992 onwards.

2.6 TRAINED MANPOWER DEVELOPMENT UNDER GWEP.

S.No	NAME OF THE AFFECTED DISTRICTS	DH		MO		HA		MP		NO. OF PERSONS TRAINED DURING 1991					NUMBER OF PERSONS REMAINING UNTRAINED					
		SANCT	POS	SANCT	POS	SANCT	POS	SANCT	POS	MOs	HEOs	HAs	MPWs	PHEs	DHOs	MOs	HEOs	HAs	MPWs	PHEs
1.	Udaipur	1	1	163	126	160	124	794	694	Nil	Nil	Nil	Nil	12	Nil	25	4	Nil	25	6
2.	Dungarpur	1	1	38	38	35	35	230	230	20	Nil	19	44	14	Nil	Nil	Nil	Nil	Nil	Nil
3.	Nagaur	1	1	21	21	38	38	165	165	15	1	18	81	Nil	Nil	6	Nil	20	84	Nil
4.	Jhalawar	1	1	31	18	57	56	298	294	10	Nil	35	180	Nil	Nil	Nil	Nil	Nil	Nil	Nil
5.	Jodhpur	1	1	68	61	138	101	513	439	40	2	79	390	Nil	Nil	2	Nil	10	40	Nil
6.	Banswara	1	1	58	58	70	68	418	418	4	6	24	91	8	Nil	Nil	Nil	Nil	Nil	Nil
7.	Barmer	1	1	48	48	88	88	529	529	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
8.	Kota	1	1	85	72	100	90	313	288	Nil	Nil	Nil	Nil	Nil	Nil	49	Nil	20	52	Nil
9.	Bikaner	1	1	9	9	11	9	228	185	3	1	5	48	Nil	Nil	Nil	Nil	Nil	Nil	Nil
10.	Jalore	1	1	54	22	19	15	400	378	22	Nil	19	378	1	Nil	Nil	Nil	4	Nil	Nil
11.	Jaiselmer	1	1	18	18	6	4	125	125	Nil	Nil	Nil	Nil	Nil	Nil	3	Nil	4	20	Nil
12.	Tonk	1	1	6	6	6	6	248	248	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
13.	Chittorgarh	1	1	63	55	67	63	103	95	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	TOTAL	13	13	662	552	795	697	4364	4088	114	10	199	1212	35	Nil	85	4	58	221	6

Abbreviation : HEO - Health Education/Media Officer, HA - Health Assistants/supervisors/inspectors
PHE - Public Health Engineers, DHO - District level Health Officer, MO - Medical Officer
SANCT - SANCTIOWED, POS - IN POSITION

Absolute efforts should be made by the state to fill the vacant posts of Medical Officers of PHC (17%), HA (12%) & MPWs (6%), especially in high endemic districts. Continuous orientation training programmes on GWEP should be organised at district/PHC levels, to train the untrained MOs, HA, MPWs, HEOs % PHEs for their efficient functioning in the programme.

Report of SWACH PROJECT, UDAIPUR

The project director mentioned that the project aimed towards Guineaworm eradication through provision of safe drinking water supply, conversion of unsafe drinking water sources and community education, in the districts of Udaipur, Dungarpur and Banswara. Since SWACH did not have any maintenance programme for handpumps, it was observed that installation with poor maintenance is not a cost effective approach. With reference to improper conversion of step-wells in certain villages, it was emphasised that concerned authorities should ensure complete conversion in all respect. During the discussions, house was of the consensus that the "manual/surgical extraction of Guineaworm should be avoided on account of its possible complications and limitations. Since the overall responsibility of Guineaworm Eradication Programme rests with the state health authorities, the GWEP related information on these three districts have been covered in the state report.

REPORT OF TAMIL NADU

1. CURRENT GUINEAWORM DISEASE SITUATION

1.1. GW SITUATION AS ON 1.1.1992.

One adult female patient of guineaworm disease was detected during June '91 in the district Ramnathpuram.

An epidemiologist from the Epidemiological Surveillance Team, Gulbarga was sent to Ramnathpuram to investigate the situation. It was found out that the patient a fortune teller, was an imported case from Andhra Pradesh. The village Tuthinathan of Pemali PHC has 4 draw wells and 1 pond which was dry. Though the risk of transmission in the village was almost nil, all necessary preventive measures including health education were promptly undertaken.

2. GWEP IMPLEMENTATION DURING 1991

2.1. GUINEAWORM CASE DETECTION & SURVEILLANCE

Tamil Nadu carried out active guineaworm case search operation during June and December '91 in the whole state. The searches were adequately cross checked to maintain good quality of surveillance.

As per the guidelines of NICD, 12 districts carries out monthly inter search surveillance and sent the monthly reports to NICD. All the 21 districts should regularly send the monthly surveillance reports to NICD.

2.2 HEALTH EDUCATION

The state actively implements the guineaworm health education programmes during the active GWEP case search operations. In Ramanathpuram special health educational drives through public health talks and group education efforts was done. The GW education day was also celebrated.

E. MAJOR ACTIONS TAKEN DURING 1989 TO 1991 TO IMPROVE EFFICIENCY AND EFFECTIVENESS OF GWEP

I. GW CASE DETECTION & SURVEILLANCE

1. In order to **detect all guineaworm cases** early, a third " Active GW case search operation" was introduced and is being carried out by guineaworm endemic states w.e.f. April, 1989. The quality of the guineaworm case search operations is concurrently monitored through sample checks by different PHC, District, State, Centre level supervisory officers and Epidemiological Surveillance Teams.

2. In order to **strengthen the guineaworm surveillance**, for timely corrective measures, **ALL** the districts in GW endemic states were advised to submit **"Monthly GW Report"** even if no cases were detected, in the prescribed format, to their respective state headquarters and to NICD Delhi, wef August 1990.

3. The non-endemic states were advised to send their report of 'nil guineaworm status' after getting reports from all their districts during 1990 and 1991.

4. After recording of guineaworm cases in May/June 1990 for the first time in urban area of Bhivandi town in Thane district of Maharashtra, **urban surveys** were conducted during August '90 in 207 urban settlements and townships covering a population of 8,20,802 in fifteen highly endemic districts of five states. These urban areas in GW endemic districts are being routinely searched during active GW case search operations wef April 1991 onwards.

II. GW CASE MANAGEMENT

5. All the PHC functionaries in GW endemic states/dists were advised to plan and implement the organised medical care services in terms of regular bandaging of GW-ulcers and manage complications, if any, among all the GW-patients. In districts being covered by ESTs, the ESTs were also advised to provide bandages to patients.

III. GW VECTOR CONTROL

6. **Vector (Chemical) Control** measures under GWEP were strengthened. States were advised to identify and treat all the unsafe drinking water sources with temephos eight times a year i.e. monthly from Feb.-June and once in two months thereafter, wef 1989; as against only four temephos applications/year uptill 1988. This has been proved very beneficial.

7. Fine nylon mesh (as designed by NICD) as well as double cloth **strainers** are being distributed w.e.f. 1989 to the house-holds in guineaworm affected villages, to filter the unsafe drinking water at the time of collection/or storage.

Distribution of fine nylon mesh strainers to endemic states by NICD

Sl. No.	Guineaworm endemic States	Nylon mesh strainers distributed			
		1989	1990	1991	Total
1.	Andhra Pradesh	-	3500	7500	11000
2.	Gujarat	-	-	4300	4300
3.	Karnataka	17750	10000	29500	57250
4.	Madhya Pradesh	12000	40000	12700	64700
5.	Rajasthan	20000	85300	84400	189700
	TOTAL	49750	138800	138400	326950

The distribution and utilization of these strainers is being regularly monitored by teams from NICD. These strainers are found to be very useful with an average life of 9 to 12 months/strainer. Considering its cost-effectiveness, strainers will continue to be distributed to house-holds in GW endemic villages.

IV. GW HEALTH EDUCATION

8. Besides improving & intensifying guineaworm health education activities, in order to create mass awareness and seek community involvement in GWEP, the "Guineaworm Education Day" was celeberated at different levels in the country, simultaneously by all endemic states during last week of April, w.e.f. 1989, as per guidelines sent to them by NICD, which is now a regular feature under GWEP.

9. **'GW Recognition Cards'** and **'Self-sticking Wall Posters'** were designed by NICD and sent to ALL the districts of the endemic states, for use by health workers during GW case detection and education programmes in the community, schools, weekly village markets, festivals, etc.

10. **In 20 highly** GW affected districts of 5 endemic states, 1489 schools, 1,65,334 students & 6,442 teachers were covered for education on various aspects of GW disease & its prevention during 1990 and 1991 by the Epidemiological Surveillance Teams. This programme will continue in future also.

11. Inorder to "educate" the community and strengthen 'GW-surveillance', during 1991 the eleven Epidemiological Surveillance Teams (ESTs) of NICD surveyed 715 **"HAATS/WEEKLY-MARKETS"** of villages in thirty GW -endemic districts of the country, wherein 40502 persons from 5143 villages were contacted/educated; and 242 rumours of GW cases as reported were cross-checked during which 6 missed GW cases were detected. This activity will continue to be implemented in future.

12. "Pamphlets" on various aspects of GW-disease and its prevention, using simple language (Hindi) and coloured pictures, highlighting the role of individual(s) in GW-eradication were printed by NICD, Delhi (Feb/March'91) which were effectively used for community education in GW affected areas by Dist/PHC level functionaries and ESTs.

13. During January'91, a very effective multicoloured "POST-STICKER" was brought out by NICD and is being used for motivating different sections of community for their active role to bid **"Fare well to guineaworm"** from India.

V. PROVISION & MAINTENANCE OF SAFE DRINKING WATER SUPPLIES

14. Efforts were made to improve the existing **inter sectoral co-ordination** between state PHED (RWS) and Health functionaries especially at district/PHC levels, for adequate **provision and maintenance of safe drinking water supplies** to guineaworm affected areas. This will further strengthen in terms of their regular monthly/quarterly meetings to review the situation and jointly draw out plan of action in this important matter.

VI. TRAINED MANPOWER DEVELOPMENT

15. During 1989 to 1991, **High priority was accorded by NICD to develop Trained Manpower under GWEP. "Teaching Modules on GWEP"** were designed by NICD for different levels of health functionaries viz. District level health officers Incharge GWEP, District Mass-Media/Health Education Officers, Medical Officer and Para Medical staff of PHC, and Public Health Engineers involved in Rural Water Supply. These modules incorporated special emphasis on "Management aspects of GWEP" and mentioned appropriate Teaching/Learning and course evaluation methods to assist the state health functionaries for trained manpower development in their states. Four Orientation Teaching Programmes were organised at NICD, wherein 74 district level health officers involved in GWEP and 14 PHED (RWS) engineers from guineaworm endemic states were thorougly trained during 1989-91.

With technical assistance of NICD, the GW endemic states organised Orientation Teaching Programme for District Mass-Media/Health Education Officers of their guineaworm endemic districts for their active involvement in guineaworm health education programme.

Most of guineaworm affected districts in endemic states, organised Crash Orientation Teaching Programmes on GWEP for Medical Officers and Para-medical staff of their respective PHCs. These programmes will continue during 1992 for continued education/teaching of health and PHE functionaries, to make GWEP function efficiently.

16. **'Set of 25 Teaching Slides'** on various aspects of GW disease and its eradication, along with detailed commentary, was prepared during 1989. All the States DHS/GWEP Officers and GW endemic districts were provided these teaching slide sets to assist them to effectively conduct the orientation teaching

programmes on GWEP for different levels/categories of health functionaries.

VII. INFORMATION & EVALUATION SYSTEM UNDER GWEP

17. Considering the advancements, the Operational Manual on GWEP (1985) was revised during 1989. This revised 4th (1989) edition of the manual, besides providing detailed information on guineaworm disease and all the operational components of the programme, contains an improvised "Information System under GWEP" for uniform data collection/recording, its compilation, analysis and timely flow to programme managers at different levels for planning and concurrent monitoring and evaluation of the programme. This modified information system came into effect from 1990.

18. In order to assist the central & state health administrators at various level, to concurrently evaluate the efficiency of GWEP implementation (operational evaluation) and its impact/effect (epidemiological evaluation), various proformae were designed and were utilized during 4th Independent Evaluation of GWEP in May 1989. The report of 4th Independent Evaluation contains the observation, recommendations and these proformae in details. The mid-year reviews of the programme were held during 1989 to 1991. The Internal Evaluations of GWEP during 1989 to 1991 also concentrated to evaluate the programme in those districts which were reported to be free from disease for last 2-3 year or were deleted or were not affected any time, apart from the problematic districts. The observations made it clear that a constant surveillance for guineaworm disease and health education in such districts is very essential. The temephos application operation in the states was frequently monitored on the spot by NICD. The programme was reviewed by Ministry of Health & Family Welfare and Director General of Health Services, during the years. The observations & recommendations of various evaluations were forwarded well in time to the states for their follow up and corrective measures.

19. Two more Epidemiological Surveillance Teams (ESTs) were deployed in January 1991 in Rajasthan to cover the districts of Udaipur, Dungarpur and Banswara, in addition to the existing ten Epidemiological Surveillance Teams (ESTs) which have been deployed since December 1989. These 12 ESTs closely monitor the GW situation and GWEP implementation in highly endemic/problematic areas. Each EST is constituted with an experienced Epidemiologist and a Para-medical Assistant, and provided a vehicle, driver and other necessary materials. The deployment and district coverage by the 12 teams is given below:-

State	Team no. & District HQ	Districts Covered during 1990 &1991
Andhra Pradesh	1.- Kurnool	Kurnool, Mahboobnagar, Prakasam, W.Godavari and Ananthpur
Karnataka	2.- Bijapur	Bijapur, Raichur, Belgaum & Dharwad
	3.- Gulbarga	Gulbarga, Bidar & Bellary
Madhya Pradesh	4.- Indore	Dhar, Jhabua & Ujjain
	5.- Shajahpur	Shajapur, Rajgarh & Dewas, Guna
Maharashtra	6.- Raigad	Raigad, Ratnagiri & Parbhani
	7.- Thane	Thane, Nanded, Latur & Osmanabad
Rajasthan	8.- Barmer	Barmer, Jaisalmer, Jodhpur & Udaipur
	9.- Jhalawar	Jhalawar, Kota,Tonk & Sawai Modhopur
	10.-Dungarpur	Dungarpur & Banswara
	11.-Udaipur	Udaipur
	12.- NICD, Delhi	Total - 36 Districts*

*contributed more than 98% of the GW cases during 1990-1991 in the country.

These ESTs besides maintaining an active guineaworm surveillance in the assigned guineaworm affected districts, help the district and PHC health functionaries in - (a) planning, implementation and supervision of various operational components of GWEP; (b) Epidemiological investigation of active GW-case villages to study factors responsible for GW transmission,(c) timely corrective measures; (d) trained manpower development; (e) community & school education, (f) Weekly village market surveys for GW case detection & education, (g) concurrent monitoring and evaluation of the programme, and (h) mantaining inter-sectoral co-ordination under GWEP, etc.

The ESTs work on a well designed methodology and information system under the control and guidance of NICD, Delhi as well as the State Health Directorate.

The details on quantum of work done by ESTs is given subsequently (F).

VIII. OPERATIONAL RESEARCH IN GWEP

20. In order to improve the efficiency of GWEP implementation to achieve zero Guineaworm incidence in the country by 1991, various simple Operational Research which could be undertaken by GWEP-managers, at different levels of programme implementation, were identified. Kindly refer the publication - Ashok Kumar (1990) : Operational Research Need in Guineaworm Eradication Programme. J. Comm. Dis., 22(4) : 236-242.

IX. OPERATIONAL EVALUATION OF GWEP-THE PARAMETERS

21. For the Operational Evaluation of GWEP, simple Parameters were designed which would enable GWEP managers to concurrently evaluate the efficiency of GWEP implementation at different levels, for taking timely corrective measures to improve the programme efficiency and effectiveness. Kindly refer to the publication - Ashok Kumar and G.Biswas (1991). Operational Evaluation of Guineaworm Eradication Programme - The Parameters. J.Comm Dis.,23(1):46-54 - Attached as Appendix - IV.

F. QUANTUM OF WORK DONE BY ESTs DURING 1991

On an average, each EST worked for 286 days and covered an average distance of 3000 Km per month during the year.

1. SITUATIONAL ANALYSIS ON GWEP GW SITUATION & GWEP IMPLEMENTATION IN ADDITIONAL G.W. ENDEMIC DISTRICTS

EST NO.	EST H.Q.	COVERED		
		DISTRICT	PHC	VILLAGE
1.	KURNOOL (A.P.)	ANANTHPUR	4	4
3.	BIJAPUR (KARNATAKA)	BELGAUM	13	30
		DHARWAD	13	26
4.	INDORE (M.P.)	UJJAIN	6	12
5.	SHAJAPUR (M.P.)	GUNA	5	8
		VIDHISA	5	9
8.	BALOTRA (RAJASTHAN)	JODHPUR	4	6
9.	JHALAWAR(RAJASTHAN)	TONK	6	6
		SAWAI MADHOPUR	11	12
	T O T A L	9	67	113

In continuation to situation analysis in 29 priority GW-endemic districts during 1990, ESTs covered 9 more GW-endemic districts for analysis during 1991, to strengthen GWEP implementation.

2. CROSS CHECKING OF ACTICE GUINEAWORM CASE SEARCH OPERATION AND EPIDEMIOLOGICAL INVESTIGATION OF ACTIVE GUINEAWORM CASE VILLAGES DURING 1991 BY ESTs

ESTs helped the district & PHC level health functionaries in planning of active GW case search operations, in their pre search meeting. During the cross check of the GW search operations in the randomnly selected villages, the ESTs detected 72 missed GW cases in the districts of Udaipur, Dungarpur (Rajasthan) and Gulbarga (Karnataka).

EST NO.	EST H.Q.	NO. OF DISTT. COVERED	VILLAGE CROSS CHECKED DURING ACTIVE GW CASE SEARCHES			EPID. INVESTIGATION OF ACTIVE GW CASE VILLAGES IN 1991	MISSED CASES DETECTED	NUMBER OF ACTIVE CASE VILLAGES
			APRIL	JUNE	DECEMBER			
1.	KURNOOL(A.P.)	2	24	46	25	11	Nil	
2.	GULBARGA(KARNATAKA)	2	24	69	42	42	8	1
3.	BIJAPUR(KARNATAKA)	1	23	75	26	5	Nil	
4.	INDORE(M.P.)	2	37	27	34	3	Nil	
5.	SHAJAPUR(M.P.)	2	92	84	38	12	Nil	
6.	THANE(MAHARASHTRA)	2	22	40	23	NO CASE	Nil	
7.	ALIBAG(MAHARASHTRA)	2	69	93	50	NO CASE	Nil	
8.	BALOTRA(RAJASTHAN)	2	22	24	20	15	Nil	
9.	JHALAWAR(RAJASTHAN)	2	62	57	21	39	Nil	
10.	DUNGARPUR(RAJASTHAN)	2	36	46	37	46	18	
11.	UDAIPUR(RAJASTHAN)	1	95	240	105	27	46	
	T O T A L	20	506	801	421	208	72	1

Two hundred and eight (36%) of the total 576 villages which reported guineaworm cases during 1991 in the country were epidemiologically investigated by the ESTs to study the factors responsible for guineaworm transmission, level of GWEP implementation and timely corrective measures needed/undertaken to interrupt guineaworm transmission.

3. HAAT (WEEKLY MARKET) SURVEYS CONDUCTED BY ESTs DURING 1991

Inorder to "educate" the community and strengthen 'GW-surveillance', during 1991 the eleven Epidemiological Surveillance Teams (ESTs) of NICD surveyed 715 "HAATS/WEEKLY-MARKETS" of villages in thirty GW -endemic districts of the country, wherein 40502 persons from 5143 villages were contacted/educated; and 242 rumours of GW cases as reported were cross-checked during which 6 missed GW cases were detected. This activity will continue to be implemented in future.

EST NO.	EST H.Q.	NO. OF HAATs SURVEYED	NO. OF VILLAGES REPRESENTED	NO. OF PEOPLE CONTACTED	NO. OF RUMOURS RECEIVED & VERIFIED	NO. OF GW CASES DETECTED WHICH WERE	
						ALREADY	MISSED BY MPWs
1.	KURNOOL	21	593	1395	55	6	1
2.	GULBARGA	40	677	3672	14	Nil	Nil
3.	BIJAPUR	38	564	4850	1	Nil	Nil
4.	INDORE	69	1436	3320	3	Nil	1
5.	SHAJAPUR	29	987	6968	25	19	1
6.	THANE	228	12	1394	Nil	Nil	Nil
7.	ALIBAG	28	414	4792	Nil	Nil	Nil
8.	BALOTRA	88	55	3192	Nil	Nil	Nil
9.	JHALAWAR	111	306	6301	140	38	3
10.	DUNGARPUR	63	99	4618	4	16	Nil
11.	UDAIPUR	---------- NO HAATS/WEEKLY MARKETS IN UDAIPUR ----------					
	T O T A L	715	5143	40502	242	79	6

Generated awareness in the community regarding causation, transmission & preventive measures regarding G.W. disease.

4. MONITORING OF TEMEPHOS BY ESTs DURING 1991

EST NO.	EST H.Q.	COVERED FOR TEMEPHOS MONITORING			
		DISTT.	PHC	VILLAGES	UNSAFE WATER SOURCES
1.	KURNOOL	2	14	114	93
2.	GULBARGA	2	22	130	106
3.	BIJAPUR	1	21	32	30
4.	INDORE	2	22	49	102
5.	SHAJAPUR	2	17	305	101
6.	THANE	2	175	399	446
7.	ALIBAG	2	48	394	417
8.	BALOTRA	2	15	125	231
9.	JHALAWAR	2	18	58	331
10.	DUNGARPUR	2	18	289	435
11.	UDAIPUR	1	24	101	122
T O T A L		20	394	1793	2414

Besides helping the district/PHC functionaries in planning for vector control through temephos applicationto unsafe drinking water sources, the ESTs cross checked 2414 unsafe drinking water sources in 17093 priority guineaworm affected villages for coverage and adequacy of temephos application. Teams also identified those unrecorded/untreated unsafe drinking water sources which were responsible for guineaworm tranmission and treated them with temephos. Where-ever deficiencies were observed in temephos application, the ESTs under took the corrective measures with feed back to the concerned functionaries.

5. VECTOR CONTROL THROUGH USE OF STRAINERS BY HOUSEHOLDS:

As a strategy, NICD regularly equips the households of guineaworm affected villages with fine mesh nylon strainers to filter the water collected from unsafe drinking water sources to district & PHC functionaries. The ESTs help the functionaries in planning as well as timely distribution these strainers to the house holds in their respective districts; and evaluate the utilisation, safe keep and the average life of the strainers in the community.

6. HEALTH EDUCATION ACTIVITIES IN SCHOOLS - CONDUCTED BY ESTs DURING 1991

EST NO.	EST H.Q.	DISTRICT COVERED	NUMBER EDUCATED		
			SCHOOLS	TEACHERS	STUDENTS
1.	KURNOOL	2	34	463	11,588
2.	GULBARGA	2	41	157	8,851
3.	BIJAPUR	1	49	355	14,782
4.	INDORE	2	56	150	5,749
5.	SHAJAPUR	2	146	388	10,157
6.	THANE	2	86	306	9,242
7.	ALIBAG	2	78	402	8,713
8.	BALOTRA	2	39	194	4,791
9.	JHALAWAR	2	128	722	17,171
10.	DUNGARPUR	2	157	360	7,333
11.	UDAIPUR	1	46	626	4,839
	T O T A L	20	860	4123	1,03,216

The response from the teachers and students were very encouraging.

Health education activities were carried out by the ESTs in all those villages which were included for situation analysis, cross checking of the search operations, monitoring of temephos application and strainers utilisation, etc.

7. PROVISION AND MAINTENANCE OF SAFE DRINKING WATER SUPPLY AND INTER-SECTORAL CO-ORDINATION

During their regular visits to the villages, the ESTs assess the adequacy of safe drinking water supply position, examine all the safe drinking water sources viz. hand pumps and pipe water supply for their regular functioning, and inspect the unsafe drinking water source that have been converted and/or need to be converted on priority. List of all such guineaworm affected villages (a) that need augmentation of safe drinking water supply, (b) where safe drinking water sources functional and (c) where conversion was incomplete/defective etc. was simultaneously communicated to the respective PHED & Health authorities for necessary action. The ESTs made active efforts in maintaining inter-sectoral co-ordination between health, PHE and other conerned agencies at district/PHC levels of GWEP implementation.

8. TRAINED MANPOWER DEVELOPMENT BY ESTs

Active efforts had been made to train the medical and para medical staff of all the guineaworm endemic PHCs/districts in the country during 1989 and 1990. However, during 1991 the ESTs organised the orientation training programmes in all those PHCs/districts which were covered for situation analysis as well as in those areas were untrained functionaries were added.

A. PRIMARY HEALTH CENTRE FUNCTIONARIES

EST	EST H.Q.	DISTRICTS COVERED	M.O.	PARA MEDICALS	TOTAL
1.	KURNOOL	ANANTHPUR	4	71	75
4.	INDORE	DHAR, JHABUA & UJJAIN	17	88	105
5.	SHAJAPUR	SHAJAPUR, GUNA & VIDISHA	45	344	389
6.	THANE	THANE	36	387	423
10.	DUNGARPUR	DUNGARPUR & BANSWARA	13	257	270
	TOTAL	10	115	1147	1262

During 1991 emphasis was given in organising orientation training programmes on GWEP for Public Health Engineers and Block Development functionaries of the guineaworm endemic PHCs/districts by the ESTs.

B. PUBLIC HEALTH (PH) ENGINEERS & BLOCK DEVELOPMENT FUNCTIONARIES

EST NO.	EST H.Q.	DISTRICT COVERED	PH ENGINEERS	BLOCK DEVELOPMENT FUNCTIONARIES	TOTAL
1.	KURNOOL	1	51	Nil	51
2.	GULBARGA	1	2	13	15
3.	BIJAPUR	1	13	50	63
4.	INDORE	2	11	168	179
5.	SHAJAPUR	1	4	223	227
6.	JHALAWAR	2	Nil	69	69
7.	DUNGARPUR	2	43	135	178
8.	UDAIPUR	1	30	160	190
	T O T A L	11	154	818	972

Remaining ESTs were assigned other activities than training.

9. FEED - BACK TO PHC/DIST/STATE LEVEL

The relevant observations along with suggestions for timely corrective measures were concurrently communicated to all levels of GWEP implementation.

G. RECOMMENDATIONS OF THE 14th TASK FORCE MEETING ON GWEP

The house resolved that the 11th, 12th and 13th Task Force Meetings on Guineaworm Eradication Programme are exhaustive and should continue to be implemented during 1992 to achieve the national objective of zero guineaworm transmission in the country. The following additional recommendations of this 14th Task Force Meeting on Guineaworm Eradication Programme should also be ensured.

1) The administrative sanction of Commodity and Cash Assistance under GWEP should be granted by April itself for timely procurement and supply of temephos to GW endemic states.

(Action - Min. of Health & FW and D.G.H.S., Govt. of India)

2) In order to prevent the inter-state transmission of GW infection, the health directorate of GW endemic states should regularly organise the inter-state and inter-district meetings to design **"Action Plan"** for surveillance and preventive measures. The minutes of these meetings should be communicated to NICD.

(Action - State DHS)

3) In order to objectively evaluate the performance of PHC, District and Zonal level Health and PHE supervisory officers of GW endemic areas, the State Health Directorate should Review their **"MONTHLY REPORTS"** on (a) GW situation, (b) GWEP-implementation, (c) 'On the spot' supervision carried out. (d) Timely corrective measures undertaken, and (e) Future action-plan, to intempt GW-transmission.

(Action - State DHS & PHED)

RECOMMENDATIONS OF THE 13th TASK FORCE MEETING ON GWEP

I. IMPROVED INFRASTRUCTURE FOR GWEP

(1) GWEP must be prioritised at all levels of its implementation, with active involvement of community, Government/Non-Government and voluntary organizations.

(Action - State DHS & PHED/RD)

(2) The state GWEP Officers should be relieved of extra responsibilities to enable him/her to efficiently plan, supervise and evaluate the GWEP at all levels of its implementation, especially at periphery. Similar strategy is warranted at District and PHC levels in guineaworm endemic districts.

In the interest of programme, the services of GWEP Technical Officer provided to each guineaworm endemic state, should be utilized exclusively to assist the State GWEP Officer.

(Action - State DHS & PHED)

II. GUINEAWORM CASE FINDING AND SURVEILLANCE

(3) The three Active Guineaworm case Search Operations during April, June and December every year should be carried out in All the districts, irrespective of their GW endemicity, in all the Gw endemic states. Urban areas in GW endemic districts should also be covered during these active guinea-worm case search operations.

(Action - State DHS)

(4) **All** the districts, in the guineaworm endemic states must regularly submit the **'Monthly Report on Guineaworm Cases'** in the prescribed format already sent by NICD, to their respective state DHS as well as to NICD, Delhi, even if the report is NIL.

(Action - State DHS)

(5) All the villages/hamlets reporting guineaworm cases must be **'Epidemiologically Investigated'** by the PHC/Distt. Health Officer, on the prescribed format already sent by NICD, to study the factors responsible for guineaworm disease occurence. Such epidemiological investigations will be helpful in taking timely specific corrective measures.

Specific action plan should be drawn and implemented effectively by March 1991, jointly by Health and PHED staff, for interupting guineaworm disease transmission in all those villages which reported guineaworm cases, during 1990, or may report during 1991.

(6) Appropriate guineaworm case detection and surveillance strategy should be evolved and efficiently implemented in difficult areas of Rajasthan (desert and tribal areas), Madhya Pradesh (Tribal areas), Maharashtra (Hilly areas) and Karnataka.

(Action - State DHS & PHED/RD)

III. EARLY GUINEAWORM CASE MANAGEMENT

(7) Every effort must be made by PHC functionaries to detect guineaworm cases in early stages i.e. at blister stage and or within one day of guineaworm emergence. These patients must be promptly and regularly managed (bandaged) to prevent complications and disease transmission.

The hazardous procedure of manual/surgical extraction of guineaworm should **NOT** be practiced in any area as it is not recommended under the National Guineaworm Eradication Programme.

(Action - State DHS & PHED/RD)

IV. GUINEAWORM HEALTH EDUCATION & COMMUNITY INVOLVEMENT

(8) Utmost efficient and effective implementation of GW Health Education Programme in community, schools, weekly- village markets and festivals etc. must be ensured.

(Action - State DHS & PHED/RD)

V. GUINEAWORM VECTOR CONTROL

(9) Considering the proven cost-effectiveness of temephos against cyclops, the regularity of temephos (50% EC) treatment of all the identified unsafe drinking water sources in guineaworm affected villages must be ensured as per the recommendation of 11^{th} and 12^{th} Task Force Meetings on GWEP; and should be concurrently supervised/monitored by PHC, District and State level officers at very frequent intervals.

(Action - State DHS)

(10) The use of strainers (either fine nylon mesh or double-cloth) for filtering unsafe drinking water by the house-holds in guineaworm affected villages having unsafe drinking water sources, should be ensured on regular basis.

(Action - State DHS & PHED/RD)

VI. PROVISION & MAINTENANCE OF SAFE DRINKING WATER SUPPLIES

(11) All those guineaworm affected villages and hamlets which do not have even a single safe drinking water source or need additional such sources, as per the list already provided by Distt./State health authorities to PHED, should be provided safe drinking water sources by March 1991. Likewise the potential unsafe drinking water sources in guineaworm affected villages should also be converted on priority.

(Action - State PHED/RD, DHS & NDWM)

(12) The Secreteries Health and PHED/RD of all the guineaworm endemic states will kindly issue suitable directives to their respective functionaries upto block level in endemic districts, to closely co-ordinate with each other and meeet at least MONTHLY to review guineaworm situation, safe drinking water

position, functioning and maintenance of safe drinking water sources, conversion of potential unsafe drinking water sources, and to draw out specific plan of action at their respective levels. The minutes of such meetings should be submitted by them for close monitoring at state level for necessary action .

(Action - State DHS & PHED/RD)

VI. INFORMATION SYSTEM UNDER GWEP

(13) The relevant reporting forms, as appended in Operational Manual (1989) on GWEP, should be made available to all the PHCs and Districts , for efficient reporting of data for timely corrective measures, at different levels.

(Action - State DHS & PHED/RD)

VII. SUPERVISION & MONITORING OF GWEP AT PERIPHERY

(14) State and district level officers should more frequently undertake 'on the spot supervision' of GWEP implementation as well as validation of data collected by PHC/PHE functionaries, to further improve the programme efficiency.

(Action - State DHS & PHED/RD)

VIII. TRAINED MANPOWER DEVELOPMENT UNDER GWEP

(15) GWEP orientation teaching programmes for medical, para-medical, health education, public health engineering and other govt./non-govt. personnel should be continuously conducted at Distt./PHC/Block levels to make these functionaries work efficiently/effectively for GW-eradication, as per the teaching modules/aids already provided by NICD to all the GW endemic districts in the country.

(Action - State DHS)

H. GWEP - PLAN OF ACTION FOR 1992.

S.No.	ACTIVITY	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.	14th Task Force Meeting	■■■■■■											
2.	Active Guineaworm Case Search Operation				■■■■■■		■■■■■■						■■■■■■
3.	Monthly Guineaworm Disease Surveillance	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■
4.	Guineaworm Case Management	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■
5.	Temephos Treatment of Unsafe Water Sources		■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■		■■■■■■		■■■■■■		■■■■■■
6.	Provision & Maintenance of Safe Drinking Water Supply	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■
7.	Guineaworm Health Education *	- continuous activity during the year, intensified during Feb to June -											
8.	Guineaworm Education Day Celebration				■■■■■■								
9.	Orientation Crash Teaching Programme ** by districts			■■■■■■							■■■■■■		
a.	District Health/Medical Officers,												
10.	PHED (RWS) Engineer & Health Officers meeting ***		■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■	■■■■■■
11.	Inter-state meetings			■■■■■■			■■■■■■			■■■■■■			■■■■■■
12.	Evaluation by NICD												
a.	Independent Evaluation					■■■■■■							
b.	Mid-year Review Meeting of GWEP officers							■■■■■■					
c.	Review meeting of ESTs	■■■■■■				■■■■■■				■■■■■■			
d.	Internal Evaluation			■■■■■■			■■■■■■			■■■■■■			■■■■■■

Note : * The schools and village weekly markets and other government/non govt. organisations should be covered for GW health education

** including block development and anganwadi workers etc.

*** Inter-sectoral co-ordination meeting between Health and PHED (RWS) Engineers at State/Districts/PHC levels to review drinking water situation, additional drinking water source need, target achievements, etc. as well as future plan of action.

LIST OF PARTICIPANTS/INVITEES

I.STATE GOVERNMENTS

Andhra Pradesh

1 Dr. M. Innaiah
Additional Director of Medical
& Health Services, Sultan Bazar,
Hyderabad - 500 001

2 Mr. A. Narasaiah
Technical Officer (GWEP),
Dte. of Medical & Health
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Hyderabad - 500 001

3 Mr. A. Krishnanmbhar,
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Hyderabad.

Gujarat

4 Dr. T.D. Gandhi
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5 Mr. V.N. Pathak,
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Karnataka

6 Mr. A.K.M. Nayak,
Secretary Family Welfare,
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Bangalore
(on 9th January F.N.)

7 Dr. C.R. Krishnamurthy,
Addl. Director of Health & Family
Welfare Services, Ananda Rao Circle,
Bangalore - 560 009
(on 9th January F.N.)

8 Dr. Gundappa,
Jt. Director of Health Services (DDC-CMD),
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Bangalore - 560 009

9 Mr. B.N. Nagarajan
Engineer-in-Chief,
Public Health Engineering,
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Bangalore - 560 009.

Madhya Pradesh

10 Mr. B.K.Taimni,
Secretary to Govt. of Madhya Pradesh,
PHED,Vallabh Bhawan, Bhopal-462 001.

11 Mr. V.K. Jain,
Engineer in Chief and Adviser (TRD),
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Satpura Bhawan, Bhopal - 462 001

12 Dr. A.N. Kapse
Assistant Surgeon, Bhopal-462 001.

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13 Dr. M.R. Chandrakapure
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14 Dr. B.M. Dama
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Central Building, Pune - 411 001.

15 Dr. S.M. Saraf,
Asstt. Dir.of Health Services
Bombay - 400 001.

16 Mr. R.M. Sagane,
Chief Engineer, Maharashtra Water
Supply and Sewerage Board,
CIDCO Bhawan, Belapur, New Bombay - 400 614.

17 Mr.P.N.Gholap
Executive Engineer (T.M.),
Maharashtra Water Supply &
Sewerage Board, CIDCO Bhawan,
Belapur, New Bombay-400 614.

Rajasthan

18 Dr. S.S. Mathur
Director of Medical and
Health Services,
Jaipur - 302 005.

19 Dr. M.M. Gogna,
Additional Director,
of Health Services,
Jaipur - 302 005

20 Mr. R.C. Dholiyan
Technical Officer (GWEP),
Dte.of Med.& Health Services, Jaipur - 302 005

21 Mr. Harish Chandra Nakra,
Superintending Engineer,
P.H.E.D.(Rural Division),
Bungalow No.2, Civil Lines,
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(on 10th January)

22 Mr. T.S. Sandhu,
Project Director, SWACH,
B-45, Panchwati,
Udaipur

Tamil Nadu

23 Dr. S. Gopalakrishnan,
Addl. Director Public Health &
Preventive Medicine,
259, Anna Salai, Madras-600 006.

II.MIN. OF RURAL DEVELOPMENT,
KRISHI BHAWAN, NEW DELHI - 110 001

24 Mr. P.K. Sivanandan,
Joint Secretary,
(on 9.1.92 A.N.)

25 Mr. A.K. Dubey,
Deputy Secretary,
(on 10.1.92)

26 Mr. K. Mazumdar,
Assistant Adviser, Technology Mission,
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III. PLANNING COMMISSION

27 Mr. M.M. Datta
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IV. CENTRAL HEALTH EDUCATION BUREAU
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28 Dr. A.K. Bhoumik,
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IV. WORLD HEALTH ORGANISATION

29 Dr. Olavi Elo
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30 Dr. N.K. Shah
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V. UNICEF,
73, LODHI ESTATE, NEW DELHI - 110 003

31 Dr. J. Rhode,
Adviser to the Regional Director
(on 10th January F.N.)

32 Dr. K. Suresh,
Project Officer

33 Mr. B.B. Samanta,
Project Officer

VI. EPIDEMIOLOGICAL SURVEILLANCE TEAMS

34 Dr. N.G. Narayana
Epidemiologist, GWEST,
C/o District Health and
Family Welfare Officer,
Gulbarga - 585 101, Karnataka.

35 Dr. Z.C. Soni,
Epidemiologist, GWEST,
C/o Dy. Chief Medical &
Health Officer (Health),
District Udaipur - 313 001
Rajasthan.

VII. NATIONAL INSTITUTE OF
COMMUNICABLE DISEASES, DELHI-110 054

36 Dr. T. Verghese,
Director

37 Dr. Ashok Kumar
Dy.Director.

38 Dr.S.S. Saha,
Chief Medical Officer.

39 Dr.Gautam Biswas
Assistant Director

40 Mr.S.M.Kaul
Assistant Director.

41 Mr.V.K.Raina
Assistant Director.

42 Dr. A. Pal
Dy.Assistant Director

43 Mr. G.C. Joshi
Entomologist, GWEST

44 Dr. S. Kumari,
Dy. Director

45 Dr. R.S.Sharma
Dy.Director

46 Dr. R.L. Ichhpujani,
Assistant Director.

47 Dr. S.J. Rahman
Dy. Director

VII. Members who did not Attend

48 Director of Health Services/ Epidemic Control,
Government of Madhya Pradesh,
Bhopal

49 GWEP-Officer
Government of Madhya Pradesh,
Bhopal

14th Task Force Meeting on Guineaworm Eradication Programme, 9th-10th January, 1992, NICD, Delhi.

PROGRAMME

9.01.1992 (Thursday)		
0930-1030hrs	REGISTRATION AT	NICD AUDITORIUM
INAUGURAL SESSION		
1030-1115 hrs.		
	Welcome	Dr. T. Verghese, Director, NICD,
	Remarks	Mr. K. Mazumdar, Min. of Rural Development
	Address	Dr. N.K.Shah, Director (PCD), WHO New Delhi
	Inaugural address	Dr. Olavi Elo, WHO Representative to India
	Vote of Thanks	Dr. Ashok Kumar Deputy Director, NICD
1115-1130 hrs	TEA	
1130-1200 hrs	Exhibition on GWEP	Dr. Gautam Biswas & Mr. G.C.Joshi

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State-wise Review of guineaworm situation, GWEP - implementation, target achievements during 1991 and future plan of action for 1992, etc.

SESSION - I

Chairperson - Dr. M.R. Chandrakapure
Rapporteur - Mr. G.C.Joshi

1200-1245 hrs.	Status report of Andhra Pradesh	Dr.M. Innaiah
1245-1300 hrs.	Discussion	
1300-1400 hrs.	LUNCH	

SESSION - II

Chairperson - Dr. S.S. Mathur
Rapporteur - Mr. V.K. Raina

1400-1430 hrs.	Status report of Gujarat	Dr. T.D. Gandhi
1430-1515 hrs.	Status Report of Karnataka	Dr. Gundappa
1515-1530 hrs.	Discussions	
1530-1545 hrs.	T E A	

SESSION III

Chairperson - Mr. P.K. Sivanandan
Rapporteur - Dr. R.L. Ichhpujani

1545-1645 hrs.	Status Report of Madhya Pradesh	Mr. B.K.Taimni
1645-1715 hrs.	Status Report of Tamil Nadu	Dr. S. Gopalakrishnan
1715-1730 hrs.	Discussions	

10.01.1992 (Friday)

SESSION - IV

Chairperson - Mr. M.M. Dutta
Rapporteur - Dr. Gautam Biswas

1000-1100 hrs.	Status Report of Rajasthan	Dr. S.S. Mathur
1100-1130 hrs.	Status Report of SWACH	Mr. T.S. Sandhu
1130-1145 hrs.	Discussions	
1145-1200 hrs.	T E A	

SESSION - V

Chairperson - Dr. S. Gopalakrishnan
Rapporteur - Dr. S.S. Saha

1200-1245 hrs.	Status Report of Maharashtra	Dr. B.M. Dama
1245-1300 hrs.	Discussions	
1300-1400 hrs.	LUNCH	

SESSION - VI

Chairperson - Dr. M.M. Gogna
Rapporteur - Dr. A. Pal

1400-1500 hrs.	Work carried out & observations of Guineaworm Epidemiological Surveillance Teams	Dr. N.G. Narayana Dr. Z.C. Soni
1500-1515 hrs.	TEA	

SESSION - VII

Chairperson - Mr. B.K. Taimni
Co-Chairperson - Mr. A.K. Dubey
Rapporteur - Mr. S.M. Kaul

1515-1645 hrs.	Status report on situation, target achievements and future plan of action for provision & maintenance of safe drinking water, including conversion of unsafe water sources, in guineaworm endemic states.	Mr. A. Krishnanmbhar Mr. V.N. Pathak Mr. B.N. Nagarajan Mr. V.K. Jain Mr. R.M. Sagane Mr. H.C. Nakra

SESSION - VIII

Chairperson - Dr. Ashok Kumar
Rapporteur - Dr. Gautam Biswas

1645-1730 hrs.	Recommendations of 14th Task Force	
CONCLUDING		Dr. T. Verghese

GUIDELINES TO STATES FOR PRESENTATION OF REPORTS

The 14th Task Force meeting on GWEP aims to undertake a comprehensive review GW situation & implementation of GWEP during 1991 as well as to decide the further course of action towards achieving the goal of Guineaworm Eradication. You are therefore requested to come prepared with your presentation highlighting the following facts about guineaworm situation & GWEP implementation in your state during 1991:-

1. The complete Village/PHC/District wise epidemiological situation of guineaworm disease indicating sex & age distribution of cases as on 1.1.92 basing on the active guineaworm case searches undertaken during 1991 and details on the NEW detected guineaworm foci (villages) in each PHC and districts.

2. Number of active guineaworm case - villages epidemiologically investigated, on proforma sent by NICD, to identify the factors responsible for guineaworm transmission and action taken to interrupt the transmission in those villages.

3. The number of guineaworm cases under management, cured and/or developed complications.

4. Identification of unsafe drinking water sources in endemic areas which required temephos treatment, the details of temephos application to such water sources and the statement on the amount of temephos received as well as consumed, as per the recommendations of 11th Task Force Meeting on GWEP (January, 1989).

5. The situation & target achievements on Provision & Maintenance of safe drinking water supply and conversion of unsafe water sources into safe ones in the guineaworm affected villages/PHCs/Districts. The targets for next year in this direction may please be specified.

6. The details on the health education activities undertaken including , Guineaworm Education Day celeberation & awarness camps in the villages and the resource inputs for health education along with the evaluation on their impact on community..

7. The district-wise information on health infrastructure sanctioned, in position and trained in GWEP during 1991 as well as plan of action for trained man power development under GWEP in the state for next year.

THE ACHIEVEMENTS OF THE ABOVE MENTIONED ACTIVITIES UNDER GWEP MAY KINDLY BE QUANTIFIED WITH REFERENCE TO THE PREFIXED TARGETS TO BE ACHIEVED DURING 1991.

8. The system of supervision, monitoring & evaluation of GWEP in the state; and various administrative, technical, operational and social problems/constraints experienced while implementation of GWEP along with their proposed solutions.

9. Action taken on the recommendations of 13th Task Force Meeting on GWEP held at NICD, Delhi, January 1991.

10. The proposed calender of specific activities and targets to be achieved under GWEP and manpower requirements for implementing the GWEP during 1992.

A computerised proforma was provided to states for preparing detailed report.

J. Com. Dis., 23 (1) : 46-54, 1991

Appendix IV
Reprint

Operational Evaluation of Guineaworm Eradication Programme—The Parameters

ASHOK KUMAR* AND G. BISWAS*

(*Received for publication : 7 November, 1990*)

ABSTRACT

In order to achieve guineaworm eradication in 1990s, the Guineaworm Eradication Programme (GWEP) should operate with utmost efficiency; and needs to be concurrently evaluated for timely corrective measures. Some simple parameters, their relevance, levels and frequency at which these may be helpful to objectively evaluate the GWEP efficiency are discussed in this communication.

INTRODUCTION

In order to achieve global eradication of guineaworm (GW) disease in 1990s[1]; the national GW-Eradication Programmes (GWEP) should operate with utmost efficiency at all levels of implementation. This necessitates the concurrent monitoring and evaluation of the efficiency of each operational component (Fig. 1) of GWEP with reference to their pre-fixed objectives[2].

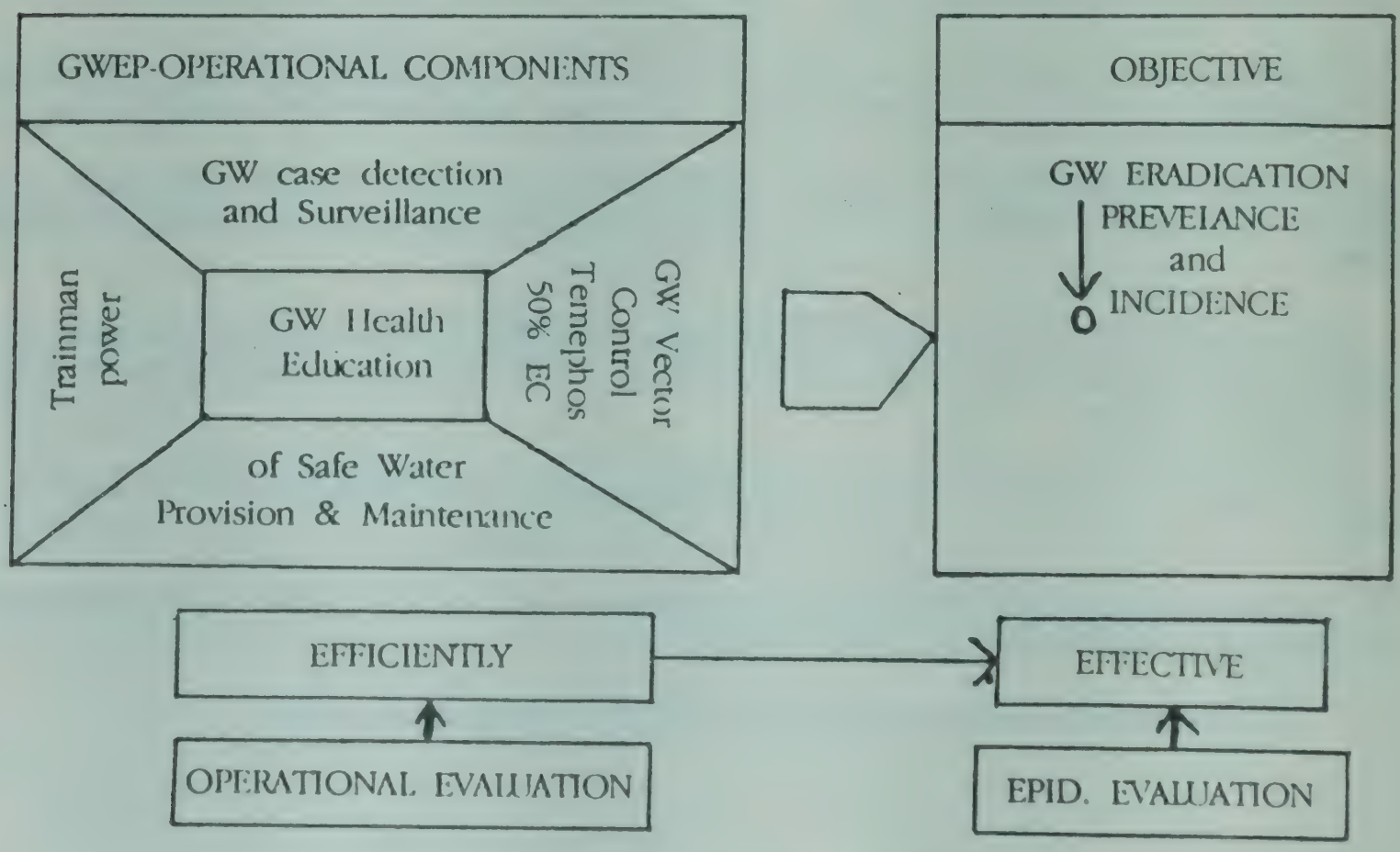

Fig. 1 : Operational evaluation of GWEP

*National Institute of Communicable Diseases, Delhi 110 054.

This operational evaluation of GWEP will guide and help the programme managers to take timely corrective measures, at their respective levels, to achieve the objectives within stipulated time and available resources.

Pre-requisites for Evaluation

The standardization and uniformity is necessary in defining various terms and data collection methodology in order to make valid comparisons. A simple information system is necessary for timely flow of relevant and reliable data which may help in objectively defining some specific parameters for programme evaluation. On the-spot field supervision of functioneries is equally important to validate the programme functioning as well as the data informats[3-5].

The Operational Manual on GWEP in India[6] highlights the standardized definitions, operational methodologies of implementing various components of GWEP, information system for data collection at periphery and its flow, for concurrent monitoring of GWEP at different levels of implementation and guidelines for trained manpower development as well as their supportive supervision.

The methodologies and proformae for concurrent evaluation of GWEP in India are well designed[7].

Operational Evaluation of GWEP—The Parameters

Keeping in view the operational objectives of various components of GWEP (Fig. 1), attempts have been made to define some simple and specific parameters to evaluate their operational efficiency. These parameters could be many, but have been restricted only to those few ones which are relevant and can be easily utilised by the programme managers.

Resource Inputs in GWEP

GWEP cannot function efficiently unless it is duly prioritised and provided with adequate resources, viz, sufficient trained manpower, material and financial support at different levels of its implementation, especially Primary Health Centres. It is, therefore, necessary to evaluate the resource inputs into GWEP in terms of their availability, adequacy, quality, functioning, utilisation and projected requirements, etc.

The following parameters may help to evaluate the resource inputs and further needs into the programme:

Manpower	Transport	Records/reports, health education and other material, etc.
Availability of trained manpower against sanctioned capacity	Availability at PHC/Distt.	
Man-days (man hours) worked per month by different categories of PHC, District	Working days vehicle off the road per month	Availability Adequacy Functional Maintenance

Manpower	Transport	Records/reports, health education and other material, etc.
and State functionaries for Guineaworm Eradication		Utilization Projected requirements
Man days spent per month 'on the spot—supervision' of GWEP implementation by different categories of supervisory staff	Working days vehicle used for GWEP per month	

Guineaworm (GW) Case Detection and Surveillance

In order to identify *all* the GW affected villages and guineaworm patients/cases, three active GW case search operations are undertaken in all the endemic states during April, June and December every year. During each GW case search operation, the health worker is required to search *all* the house-holds in the villages assigned to him and detect the guineaworm cases in early stages. He is not expected to miss any village or guineaworm case, which may continue to maintain the guineaworm transmission in the area. Constant surveillance, especially during inter-search periods, has to be maintained by the workers in order to continuously detect/record the new guineaworm foci/patients for timely corrective measures. Once a guineaworm endemic village remains free from guineaworm disease for three consecutive years, it becomes eligible for deletion from the list of guineaworm affected villages. The deleted villages are followed up for GW reinfection, if any, in future.

For above mentioned objectives; the parameters illustrated in Table 1 will help to evaluate the efficiency of worker/team in guineaworm case detection and surveillance in an area.

Guineaworm Case Management

All the detected active guineaworm cases are required to be managed with regular bandaging, to prevent the complications. The complications need to be detected early for timely management to prevent deformity and disability.

The parameters indicated in Table 2 will assist in evaluating the efficiency of medical care to guineaworm patients. Besides these parameters, the 'GW ulcer healing time' and 'GW patient's satisfaction' are important factors to evaluate the quality of medical care services being provided to them.

Guineaworm Vector Control with Temephos 50% EC

Workers are required to identify and record all the unsafe drinking water sources (USDWS) like step well, ponds, tanks, etc, in all the GW affected villages; and these USDWS need to be treated regularly with correct dosage (1 ppm) of temephos (50% EC), i.e., monthly during February to June (transmission season) and once in two months during July to December every year.

Table 1—Guineaworm (GW) case Detection and Surveillance

Sl. No.	Parameters	Perameter will evaluate the efficiency of worker/team in	Level and Frequency		
			PHC	DIST.	STATE
1.	**Village GW—Search Rate** No. of villages and hamlets searched during an active GW case search operation ——————————— × 100 Total villages and hamlets in an area.	(1) Completeness of Active GW Search Operation(s) (2) detection/identification (a) of all the GW cases in early stage before infecting drinking water sources, *and* (b) the hidden/new GW foci. These parameters will, thus, help in improving the efficiency of GW case detection programme; besides timely control measures to interupt GW—transmission in an area.	After every Active GW-case search operation.		
2.	**Early GW-Case Detection Rate** No. of GW cases detected at blister stage or within one day of GW emergence. ——————————— × 100 Total GW cases detected in an area.		M	Q	Q
3.	**Missing GW-Case Rate** No. of GW cases/Patients found ——————————— × 100 No. of persons declared GW free by health worker and cross checked for GW disease.		M	Q	Q
4.	**New GW—Village Rate** No. of villages and hamlets reported GW cases first time during a calender year ——————————— × 100 Total GW affected villages and hamlets in an area.				
5.	**GW—Village Deletion Rate** No. of GW affected villages and hamlets deleted during a calender year. ——————————— × 100 Total GW affected villages and hamlets in an area.	(3) Constant Surveillance and implementation of Guinea-worm Eradication Programme. Inefficent surveillance and pro-gramme implementation will result in delayed deletion of GW-affected villages from endemic list as well as increased number of GW re-infected villages/hamlets, in an area.	A	A	A
6.	**Village GW—Reinfection Rate** No. of deleted GW-villages and hamlets reporting GW cases again. ——————————— × 100 Total GW affected villages and hamlets deleted in an area.		M	M	Q

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An Area—Could be a Sub-Centre, Primary Health Centre (PHC)/Block, District (Dist), State/Province or country.
M—Monthly, *Q*—Quarterly, *A*—Annually.

Table 2—Guineaworm (GW) Case Management

Sl. No.	Parameters	Perameter will evaluate the efficiency of worker/team in	Level and Frequency PHC	DIST.	STATE
1.	**GW Case Management Rate** No. of GW cases managed (with regular bandaging) / Total GW cases recorded in an area. × 100	(1) the coverge of GW patients for regular bandaging, (2) the management of GW-patients at early stage of disease, to prevent complications as well as contamination of drinking water sources, and (3) the quality of medical care being provided to GW-patients.	M	M	Q
2.	**Early GW—Case Management Rate** No. of GW cases managed at blister stage and/or within one day of GW emergence. / Total GW cases recorded in an area. × 100		M	M	Q
3.	**GW Complication Rate** No. of GW cases developed complications. / Total GW cases recorded in an area. × 100	An increasing 'complication rate' will indicate about the delayed and poor quality of medical care services to GW patients; thus will help to take immediate action to improve the efficiency of medical care services.	M	Q	Q

This important activity needs to be closely monitored by the supervisory officers for its efficient implementation in order to interrupt guineaworm transmission in an area.

The parameters identified in Table 3 will help the programme managers to evaluate the efficiency of temephos operation.

Provision and Maintenance of Safe Drinking Water Supplies

The Health and Public Health Engineering Department functionaries, in a co-ordinated manner, have to efficiently ensure the provision and maintenance of sufficient safe drinking water supplies (SDWS) on a regular basis, to all the guineaworm affected villages and hamlets. This is a key factor for guineaworm eradication.

The parameters indicated in Table 4 will help to evaluate the efficiency in target achievement in provision and maintenance of safe drinking water supplies under guineaworm eradication programme.

Guineaworm Health Education

This vital integrated component of GWEP aims to efficiently and effectively educate the people of guineaworm endemic areas about various aspects of guineaworm disease and its prevention and motivate them to: (a) suspect and voluntarily report about guineaworm patients in early stages, (b) adopt the prescribed preventive health practices against guineaworm disease, and (c) participate/co-operate in successful implementation of GWEP

Table 3—Guineaworm (GW) Vector Control with Temephos 50% EC

Sl. No.	Parameters	Perameter will evaluate the efficiency of worker/team in	Level and Frequency PHC	DIST.	STATE
1.	**USDWS Missing Rate** No. of USDWS not recorded by health worker(s) ——————— × 100 Total GW affected villages and hamlets randomoly checked.	(1) detecting all those unsafe drinking water sources (USDWS) in all the GW-affected villages and hamlets, which need regular temphos appli-cation.	M	Q	Q
2.	**Village Temephos Coverage Rate** No. of villages and hamlets covered for Temephos operation. ——————— × 100 Total GW affected villages & hamlets with USDWS, in an area.	(2) Completeness in coverage of GW affected villages as well as identified USDWS for temephos application.	M	Q	Q
3.	**USDWS Temephos Coverage Rate** No. of USDWS treated with Temephos. ——————— × 100 Total USDWS recorded in GW affected villages and hamlets in an area.		M	M	Q
4.	**Temephos Regularity* Rate** No. of USDWS received atleast threefourth of the required Temephos applications ——————— × 100 Total USDWS recorded in GW affected villages and hamlets in an area.	(3) regularlity in temephos treatment/application to identified USDWS in GW affected villages. Temephos regularity during Feb-June is of utmost importance to interupt GW-transmission.	Q	Q	Q
5.	**Cyclops Positivity Rate** No. of USDWS found positive for cyclops ——————— × 100 Total USDWS randomly cross checked in GW affected villages.	(4) cyclops positivity rate if monitored monthly, will be very useful para-meter to evaluate overall efficiency of temephos operation in terms of coverage, requlanity and correct dosage of temephos application. Since missing and/or inadequate coverage & dosage of temephos in USDWS of GW affected villages will result in GW transmission, these para-meter will help to take immediate action to improve the efficiency of vector control measures implementation.	M	M	Q

*USDWS need to be treated with temephos monthly from Feb. to June, and once in two months thereafter, i.e. 8 times a year

Table 4—Provision and Maintenance of Safe Drinking Water Supplies

Sl. No.	Parameters	Perameter will evaluate the efficiency of worker/team in	Level and Frequency PHC	DIST.	STATE
1.	**Safe Drinking Water Source (SDWS) Sufficiency Rate** No. of GW affected villages and hamlets with sufficient SDW sources. ——————————— × 100 Total GW affected villages and hamlets in an area.	(1) Establishment of a continued inter-sectoral co-ordination between Health & PHE functionaries. (2) Providing sufficient number of safe drinking water sources, and	Q	Q	Q
2.	**SDWS (HP/PW) Functional Rate** No. of HP/PW found functional ——————————— × 100 Total HP/PW supplies randomnly checked in GW affected villages in an area. *Note*— (a) HP—Hand pump, PW—Pipe-water (b) Sufficient SDW sources means one HP/PW per 150 population, as well as each GW affected village and hamlet should have SDWS even if its population is less than 150.	(3) Regular HP/PW maintenance in order to make the safe drinking water available to community, without any interuption, especially during summer/transmission period.	M	M	Q

Table 5—Guineaworm (GW) Health Education

Sl. No.	Parameters	Perameter will evaluate the efficiency of worker/team in	Level and Frequency PHC	DIST.	STATE
1.	**Voluntary GW—Case Reporting Rate** No. of GW cases reported voluntarily & or by villagers ——————————— × 100 Total GW cases recorded in an area.	(1) educating people about various aspects of GW diseases, especially the early signs/symptoms so that they identify disease in early stage and voluntarily report at PHC,	M	M	Q
2.	**Strainer Utilisation Rate** No. of house holds found to be effectively using the strainers for filtering drinking water ——————————— × 100	(2) motivating community to adopt the GW-preventive behaviour/practices like using the drinking water from HP/PW/DW, filter drinking water through	M	Q	Q

Sl. No.	Parameters	Perameter will evaluate the efficiency of worker/team in	Level and Frequency PHC	DIST.	STATE
	Total house holds (provided with strainers) randomnly cross-checked in GW affected villages in an area.	strainer if collected from unsafe sources, and not to allow the GW patients to enter into such water sources, and			
3.	**HP/PW Utilisation Rate** No. of house-holds using only HP/PW for drinking water ——— × 100 Total house-holds randomnly interviewed in those GW affected villages having HP/PW suplies.	(3) seeking community involvement and co-operation in GW case detection, temephos treatment & maintenance of safe water supplies. These are key factors for interupting GW transmission and success of GWEP.	M	Q	Q

The parameters in Table 5 will help to evaluate the efficiency of guineaworm health education programme to take further measure to make it more effective.

Though some of the parameters may be relatively more sensitive and specific to evaluate the same activity/component of the programme, at most instances more than one parameters together will be helpful for a valid interpretation and evaluation. Therefore, keeping in view the objectives of evaluation, appropriate parameters may be selected and used in their perspectives. The repeated use of parameters at different intervals will help to evaluate the improvement in efficiency of the specific programme activity/component.

It is also emphasised that these parameters can never replace or undermine the value of 'on the spot' observation for evaluation. Rather, continuous use of these para-meters guides the programme managers to identify those activities/areas/workers that need an immediate 'on the spot' verification and supervision for timely corrective measures in the programme to achieve desired objectives within defined time and resource inputs.

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